Royal Commission on
Canada's Economic Prospects

Financing of Economic Activity in Canada

by Wm. C. Hood

Including
A Presentation of National Transactions
Accounts for Canada, 1946-54,
by L. M. Read, S. J. Handfield-Jones
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A PRESENTATION OF NATIONAL TRANSACTIONS ACCOUNTS

FOR CANADA, 1946 - 1954

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L. M. READ, S. J. HANDFIELD-JONES and F. W. EMMERSON

While authorizing the publication of this study, which has been prepared at their request, the Commissioners do not necessarily accept responsibility for all the statements or opinions that may be found in it.

W. L. GORDON, Chairman

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PREFACE

PLANS FOR THIS STUDY were laid at the beginning of the Commission's work in the early summer of 1955. Extended memoranda on several topics of special concern to the Commissioners were prepared over the next sixteen months and their contents are included in the study. The examination of relevant briefs submitted to the Commission and the collecting of other material were carried on as time permitted during the first two years of the Commission's work. However because of the writer's other duties for the Commission, it was only possible to begin preparing the final draft in February 1957. The actual writing was therefore accomplished after the author had resumed his teaching post in the Department of Political Economy at the University of Toronto.

We lay our pen down at the end of July 1958 with considerable regret, for in many respects the study is not yet complete. For example, there are several topics which we originally planned to treat at some length, some of them of very considerable current interest, which have been either omitted or treated very lightly. These topics are referred to specifically in Chapter 1. Their inadequate development in this study must be regarded as an unfortunate requirement of circumstance and not as a reflection of the author's views of their relative importance. The study is also incomplete in that the record of events is carried further in the later chapters than it is in the earlier ones. It would have been desirable to bring the story forward to the same date in all chapters, but it seemed unwise to delay publication in order to extend the earlier chapters.

Having expressed regret that the study has not been completed according to the original design we wish to record that this is in no sense the Commission's responsibility. On the contrary the Commission graciously made special and unusual arrangements to permit the final preparation and publication of the study.

Even though the study is incomplete, we hope that the information it contains and the point of view of the capital market it presents will be

found useful. While there is now a substantial body of literature on the Canadian banking system and monetary policy, the working of the Canadian capital market and of many of the institutions within it have not been described and analyzed extensively. There is need for several monographic studies of particular institutions and segments of the market. This volume is offered modestly as a mapping out of the areas to be covered and as an approach to the problem of appraising the functioning of the market.

Mr. J. V. Poapst, while employed on the Commission's staff, prepared several lengthy memoranda on a variety of topics related to this study. The author gratefully acknowledges the help he derived from them and from the many discussions of the project we held. The Dominion Bureau of Statistics and the Bank of Canada, as usual, were most generous in providing assistance. This assistance took many forms: grants of access to unpublished material, help with compiling and charting statistical information, explanations of technical matters and warnings of pitfalls. With Dr. O. W. Main, his colleague at the University of Toronto, the author has discussed the problems of the capital market for several years. We had to discontinue work as collaborators on a major project in this area when the Commission was established in 1955, nevertheless Dr. Main has since then spent many long hours listening to the reading of drafts, discussing them and offering suggestions. Dr. E. P. Neufeld, also of the University of Toronto, has read drafts of some of the chapters and offered constructive advice.

A special word of thanks is due to those who have seen to the details of editing and publishing this study. Major Norman Lafrance, the Commission's efficient administrative secretary, attended to an incredible number of detailed arrangements and contributed to the editing of the French and English versions of the volume as well. Mr. B. M. Erb, the Commission's editorial consultant, at some considerable sacrifice, supervised the editing and production of the book. Mr. Maurice Sauvé, the assistant secretary of the Commission, gave special attention to the preparation of the French edition. Mrs. Marguerite F. Glaude handled many details of production of the copy.

The final word of gratitude has been reserved for those students at the University of Toronto who patiently shared in the author's struggle with this book in the session of 1957-58. Even though it is not a text book, we would be gratified if other students derive some benefit from perusing it.

A special preface to Part VI appears at page 461.

ABBREVIATED TABLE OF CONTENTS

TABLE OF CONTENTS

PART I INTRODUCTION

PART II INCOME EXPENDITURE AND FINANCE IN CANADA IN THE POST-WAR PERIOD

Chapter 3. THE NATIONAL TRANSACTIONS ACCOUNTS

Chapter 4. THE FINANCING OF ECONOMIC ACTIVITY IN THE POST WAR PERIOD—AN OVER-ALL VIEW

PART III SOME PROBLEMS OF FINANCE IN INDIVIDUAL SECTORS OF THE ECONOMY

Chapter 5. Consumer Finance

Chapter 6. BUSINESS FINANCE

PART IV FINANCIAL INSTITUTIONS

Chapter 7. LIFE INSURANCE COMPANIES AND SELECTED OTHER FINANCIAL INTERMEDIARIES

Chapter 8. THE BANKING SYSTEM AND THE MONEY MARKET

PART V CONCLUSION

Chapter 9. The Canadian Capital Market

PART VI THE NATIONAL TRANSACTIONS ACCOUNTS FOR CANADA 1946-1954

PART I

INTRODUCTION

1

AN OUTLINE OF THE STUDY

THE FINANCING of economic activity in post-war Canada is the subject of this volume. The flows of funds to and from the major sectors and financial institutions of the economy and the control exercised over these flows by prices of real and financial assets, laws and government policy, and private practices and traditions are studied. The principal object is to form an impression of the respects in which the financial system works well and of the respects in which its functioning might be improved. The study is neither exhaustive nor definitive, however.

The point of view of the capital market that we have adopted is set forth in some detail in Chapter 2 which, with the present chapter, constitutes the introductory part of the study. We first explain what we mean by the capital market, and describe the economic functions served by the market. Transactions involving non-monetary financial assets are said to take place "in the capital market". These transactions give rise to flows of funds among economic units of all kinds, the net flows being from savers to dissavers. The whole network of flows is "regulated" by myriad prices, practices and policies. It is the working of this system of regulators that is our main concern. The performance of the regulators of the flows of funds must be adjudged however in relation to the broad objectives of economic policy that are being pursued. There is a brief discussion of these broad objectives in Chapter 2 and we record there our decision to concentrate attention upon a group of them that are held in common, though perhaps with different priorities, by all political parties in the country. We conceive the problem of appraising the capital market to be "to judge the performance of the regulators of the market relative to the functions to be fulfilled in the light of the objectives to be achieved".

To maintain high levels of employment, control inflation, and promote economic growth are objectives which command wide support and, accordingly, they are given much attention in the study. The major focus of attention however is on the objective of so organizing activity that, within

wide limits, economic decisions may be taken by producers and consumers operating in free markets. In Chapter 2 we examine the technical conditions that must be met in the capital market if this last objective is to be served well and a considerable part of the rest of the study is concerned with the extent to which these conditions are met in the various segments of the capital market. To the extent they are not met we must enquire whether improvements in the operation of the price system as such may be encouraged, or whether satisfactory supplementary of alternative regulators have been established.

Part II of the volume, comprising Chapters 3 and 4, provides an over-all review of income, expenditure and finance in Canada in the post-war period, with the aid of a special set of national accounts called "National Transactions Accounts" developed expressly for this study. These accounts, an extension of the familiar income and expenditure accounts, are described in general terms in Chapter 3 and are described in detail and presented in full in Part VI. In Chapter 4 the history of economic activity and its financing is recounted in aggregate terms, sections of the chapter being devoted to the years 1946-48, 1949-51, 1952-54 and 1955-56 respectively. For each period the facts pertaining to the levels of economic activity, the financial needs and requirements of each sector of the economy, and the net changes in financial assets and liabilities of these sectors are first arrayed and then the operations of regulators of the flows of funds are described. The three post-war waves of inflation and the intervening periods of stable progress or recession are delineated. The approach in this chapter is broad in the sense that attention is for the most part directed to broad sectors of the economy and aggregative indicators of activity. While there is considerable discussion of "the price level" and "the level of interest rates", relative prices and relative yields are not discussed at length. Much more attention is given to relative prices and yields of financial assets in later chapters. Chapter 4 provides the background for the more detailed discussion of the financing of particular sectors of the economy and the affairs of selected financial institutions in the later chapters.

In Part III, consumer finance and business finance are taken up in Chapters 5 and 6 respectively. In discussing consumer finance we deal not only with consumers and individuals but with some of the financial institutions, especially instalment finance companies, which specialize in providing financial services to consumers. Following the pattern established in Chapter 4, facts pertaining to the financial position and transactions of consumers and consumer finance organizations are assembled first and then the regulators of the flows of funds as they affect consumers and the finance and loan companies are discussed. In the factual review of consumer finance, aggregative data pertaining to the entire consumer sector of the economy are reviewed first and then data on the saving and financial assets and liabilities of consumers by income level. The relative frequency

of holding of selected assets and liabilities at each income level, the percentage distributions by income of the total amounts held and the average portfolio composition at different income levels are studied. The assets and liabilities and changes in these, of sales finance companies, small loan companies and licensed money lenders, and credit unions are then discussed using such information as is available. The latter half of the chapter is devoted to the regulators of the flows of funds in this sector of the economy. Taxes and consumer finance and the sensitivity of consumers as investors to the relative yields of assets and as borrowers to the relative costs of funds, are given extended discussion. This is followed by consideration of the legislation governing the consumer finance organizations, the sensitivity of instalment finance companies to the costs of the funds they raise, and the impact of monetary policy on the finance companies.

Chapter 6 is devoted to the complicated and varied subject of business finance. The standard pattern is followed of treating facts of financing first and then the regulators of financing. In the factual review there is first a discussion of saving and investment by business. The financing of privately-owned, non-financial corporations is then taken up. Sections on the financing of agricultural business, small non-agricultural business and small mining and oil development companies conclude the factual review. Income tax laws as regulators of the flows of funds in the business sector are given rather extended treatment. The discussion is prefaced by a consideration of the shifting of the corporation income tax. This is followed by an examination of the particular ways in which details of the tax regulations affect business saving and investment. The influence of tax laws on the forms in which business capital is raised is the final aspect of the impact of taxes on business finance that is examined. In considering the influence of the price mechanism on business finance, recognition is given the fact that a large proportion of the funds used by business is comprised of retained earnings and depreciation allowances and is raised through transactions in the goods market rather than in the capital market. The question is raised whether the practice of self-finance in business is inimical to the efficient allocation of resources in the economy. This discussion pertains to the influence of prices in the markets for goods and services on business finance. It is followed by an analysis of the influence of security prices, or the costs of funds on the choices among forms of equity and debt financing. The chapter concludes with brief reference to conventions and practices of business and the laws governing the issue and trading of securities as influences on the flows of funds in the business sector.

Selected financial institutions are studied in Part IV. Chapter 7 concerns the trust companies, investment companies, life insurance companies and pension funds. The banking system and the money market are treated systematically in Chapter 8.

The life insurance companies are given more extended treatment in Chapter 7, than other institutions. A review of their assets, their liabilities

arising from contracts written, saving through life insurance contracts, and some technical factors affecting the size of the pool of funds under their administration constitute the factual review of these companies. As regulators of the flows of funds the insurance companies acts are discussed in some detail as are the relative yields of financial assets and other regulators such as traditional practices of the companies. The section on life insurance companies concludes with a brief essay on principles of investment for these companies. The discussions of trust companies, investment companies and pension funds in each case follow the pattern of first introducing relevant facts concerning operations and then examining regulators of the flows of funds to and from these institutions.

In Chapter 8, on the banking system and the money market, the factual review refers to structural characteristics of the commercial banking system, the assets, liabilities, earnings and expenses of the chartered banks. It then refers very briefly to certain features of the central banking set-up in Canada. The section concludes with a description of the money market in Canada at the present time. The discussion of regulators of the flows of funds embraces the banking legislation, the rates paid by commercial banks on deposits and charged by them on loans, and the sensitivity of banks to changing relative yields of assets. Various operating practices of the banks are referred to as affecting the flows of funds to or from the banks. Finally, the central bank's influence over the commercial banks is referred to at some length; the direct influence exerted over cash reserves and the variety of influences exerted through offers of advice and suggestions are both considered.

Part V of the volume consisting of the single chapter entitled "The Canadian Capital Market" sums up the discussion in the previous parts and offers the judgments of the author as to the strengths and weaknesses of the Canadian capital market as revealed by its functioning over the post-war years. The chapter opens with a brief restatement of the point of view of the volume. A review of the defects of the price system as it operates in the Canadian capital market then follows, together with a discussion of the developments serving to reduce or to increase their importance. Reference is then made to the problems of certain groups of fund raisers such as small business operators, home-owners and municipalities. The discussion of monetary policy is then taken up where it was left off in Chapter 8. In Chapter 8 the impact of monetary policy on the banks is discussed; in this chapter, wider aspects are considered including problems and methods of implementing policy and the relationship of monetary policy to public debt policy. The chapter concludes with some thoughts on the scope of the capital market, and the priorities accorded the objectives of economic policy. Chapters 2 and 9, taken together with the concluding sections of the other chapters, set forth the objectives and conclusions of the study. The conclusions will not be reviewed here.

As was stated above, Part VI of the volume contains the full detail of the National Transactions Accounts prepared for this study together with a discussion of the concepts underlying them and of the sources and methods used in developing them.

We recorded in the Preface our regrets that several topics, germane to a study of the capital market, and some of them of considerable current interest, have either not been accorded extended treatment or have been omitted altogether. The reasons for these omissions are not the same in all cases.

The financing of the purchases of houses, new and used, is one topic of current interest, to which it had been intended to devote a full chapter in Part III. The decision to omit the chapter was based solely on the necessity to bring the work to an end. The decision was made all the more reluctantly as a considerable amount of research, thinking and drafting had already been done. There is, however, reference to the financing of housing, the suppliers of mortgage funds, the rates of interest on mortgage loans and the secondary markets in mortgages in the book at several points. Much factual information on the subject is readily available especially in the publications of Central Mortgage and Housing Corporation, and the author is aware of further research in this field, the fruits of which should be published in the very near future.

The financing of government receives very little attention in this volume. It is a far-reaching, complicated subject. It was a matter of deliberate choice at the planning stage of the project to emphasize other aspects of the financing of economic activity than the activities of government. There is, however, in this volume considerable discussion of the role of taxes as regulators of the flows of funds in the capital market. The importance of government debt in the portfolios of institutions and of other investors is discussed, the use of government debt as a vehicle for the central bank's open market transactions is emphasized and the importance of government debt policy in relation to monetary policy is not overlooked. We had intended to consider some aspects of the financing of municipal requirements to a greater extent than we have been able to do, however. While we had always regarded the fundamental problem of allocating functions among the levels of government in relation to their financial abilities as beyond our frame of reference we had hoped to discuss at some length certain technical problems of the marketing of municipal securities.

Most readers will be amazed at the omission of all but the most oblique references to the importance of foreign capital in the Canadian capital market. The omission is perhaps not so amazing however, if considered in relation to other publications of the Commission. The study entitled *Canada-United States Economic Relations* [1] contains an extended discussion of foreign investment in Canada and Canadian investment abroad.

1 By Irving Brecher and S. S. Reisman.

The subject has not been entered into in this volume because of its inclusion in this other study. We have referred in this study, though not at any length, to the interrelations between the capital market in Canada and foreign capital markets, especially in the United States, and though more detailed reference to the foreign exchange market would be relevant and warranted it has been referred to at several points in the book. An exhaustive treatment of the Canadian capital market should, it is granted, consider international flows of capital and the foreign exchange market much more extensively than has been done in this volume.

In the discussion of business finance there is no specific reference to the financing of government enterprises and privately-owned public utilities operating under the surveillance of administrative tribunals which determine the rates they may charge for their services and other features of their operations. This is a serious omission. Some of these enterprises are among those which raise the largest amounts of capital sought by Canadian organizations. The omission of specific discussion of the financing of their activities results solely from want of time for the necessary research.

There is some description in the chapter on business finance of the financing of small ventures in the fields of mining and oil development, but this is only a token recognition of an important special aspect of the financing of business which begs description and analysis but which we did not have the resources to accomplish.

We had hoped to discuss the methods of marketing securities, both new and outstanding issues, at greater length but this hope had to be abandoned as did the hope of discussing the markets in selected specific assets more explicitly.

This is a long catalogue of important omissions. Probably others will add further items to the list. We can only hope that it will not be generally felt that all the important aspects of the subject have been omitted!

2

THE CAPITAL MARKET — A POINT OF VIEW

THE ENORMOUS programme of capital investment in Canada in the post-war years has been part of a very great increase in the flow of incomes and expenditures on goods and services generally. Some economic units have financed their expenditures on goods and services in each year directly out of the incomes they earned in that year. Others have financed such expenditures in part less directly by disposing of the financial assets in which their accumulated saving had been invested. Still others by issuing financial obligations have drawn on the saving, accumulated and current, of other economic units, and on new additions to the stock of money.

Thus the production and sale of the goods and services that made up the total of gross national expenditure in each post-war year has been accompanied by a great flow of financial assets of one kind or another. There has been an increase in the debt and equity instruments outstanding and a vast shifting of the ownership of and liability for such instruments. This flow of financial assets takes place through the capital market. We shall examine several aspects of the capital market in this study; in this chapter we shall describe the market in rather general terms, suggest its broad functions, discuss the regulators of the flows through it and enquire into the problem of how to judge its performance.

A. The Capital Market and its Functions

1. A definition of the capital market

To assist in defining what we shall mean by the term "the capital market" let us classify the items which economic units may exchange. The basic distinction we make is between financial items and non-financial items. Non-financial items include real goods, services and intangibles such as good will. All other items exchanged we classify as financial items, distinguishing however, monetary from non-monetary financial items. Non-monetary financial items consist of (a) equities such as stocks; (b)

evidences of debts, such as promissory notes, mortgages, bonds and debentures as well as deposits at institutions other than commercial or central banks; and (c) life insurance and annuity contracts though these involve a mixture of service, debt and equity. Monetary items consist of money itself, domestic currency held by banks, inter-bank deposits and foreign exchange. Money we shall define rather arbitrarily as domestic currency (coin and Bank of Canada notes) held outside of banks, and deposits in commercial banks in Canada not credited to other commercial banks, domestic or foreign. [1]

Consider now, the various ways in which a buyer of non-monetary items may "finance" his purchase.

(a) He may spend money or foreign exchange (or in the case of banks, inter-bank deposits). This money may have been received currently as earned income or it may have been accumulated over past years or it may have been received currently as a gift, i.e., a transfer of money to him without *quid pro quo*. Governments are in the unique position of being able to determine to a very large degree the amount of gifts — taxes — that they will receive.

(b) He may exchange a non-financial item for the money he wishes to spend, thus a man may sell his house to obtain money to buy a car and securities.

(c) He may barter goods for goods.

(d) He may barter securities for securities.

(e) He may barter goods for securities: this happens when a firm sells goods on the instalment plan with no down payment required; the firm "finances" an acquisition of non-monetary financial assets by giving up goods. This class of transaction is also exemplified by the case of a party exchanging real estate for a mortgage. In either case if a down payment of cash is involved, that part of the value of the goods covered by the sales finance contract or the mortgage is bartered for non-monetary financial assets.

(f) He may barter securities for goods. This is precisely the opposite of the transaction described under (e). Thus, the person who buys a house and offers a mortgage in exchange, barters this security for the house or for that part of the value of the house equal to the value of the mortgage.

(g) He may sell securities in his possession which are the liability of others, for the money needed to finance his purchase of non-monetary items.

[1] Drafts, cheques and the like outstanding, represent, for the most part, "float" or uncleared claims against deposits.

(h) He may issue financial obligations of his own and thereby obtain the money needed to finance his purchases. In the case of banks, such obligations, if they are bank deposits, will themselves constitute money.

These include the most important ways in which the purchase of non-monetary items may be financed.

In cases (d) — (h) we may say that the purchase of a non-monetary item has been financed "through the capital market" or "by having recourse to the capital market". Accordingly we may define the capital market as the set of contacts between buyers and sellers who effect exchanges involving non-monetary financial assets. In other words, considering that all exchanges are effected "in markets", we shall say that exchanges involving non-monetary financial assets take place "in the capital market".

This is a very broad definition; some will prefer narrower ones but definitions should never be matters for argument. The definition we propose is such that the "goods market" and the "capital market" overlap. It might be deemed desirable to restrict the term "capital market" to refer to transactions involving money and non-monetary financial items or the latter alone and to restrict the "goods market" to transactions involving monetary items and non-financial items or the latter alone. However, this would still leave unaccounted for, a class of transactions typified by the bartering of goods against securities.

In some usage the term "capital market" is restricted to refer to the limited set of transactions involving non-monetary financial items in which either (a) at least one of the parties to the exchange is a financial institution such as a bank, insurance, trust or loan company for example, or (b) the transaction is facilitated through the remunerated good offices of a specified list of other financial organizations such as stock exchanges, brokers and dealers. Various segments of the capital market as we have defined it here are often referred to by special terms though often these are not defined precisely. Thus we hear of the money market [2], the short-term market, the long-term market, the new issue market and of course the markets for particular kinds of securities such as the government bond market and the stock market. We shall use some of these terms in this monograph.

Though we have adopted a broader definition of the capital market than the one which restricts it to transactions involving financial institutions,

2 The term money market has a fairly common and precise usage in Canada. According to this usage it relates to transactions involving Government of Canada treasury bills and bonds with less than three years to maturity, and, since a series of technical innovations in 1954 to be referred to later, it relates also to transactions involving loans by the Bank of Canada to the chartered banks and to specified dealers (the latter effected through "purchase and resale agreements") and "day-loans" by chartered banks to these specified dealers.

The foreign exchange market though rarely referred to as a money market is probably most nearly a money market in the literal sense of the word "money", as it relates to transactions in the currencies and bank deposits of different countries or certain types of claims on such currencies and deposits.

we would not wish thereby to depreciate the role of financial institutions in the capital market. The increasing specialization of function which is characteristic of the history of economic organization in capitalist economies is evident in the capital market as in other markets. There is now in Canada, for example, a very wide range of institutions from the traditional ones such as banks and insurance companies to newer ones such as finance companies and investment companies, dealing in debts, equities or life contingency contracts, and no doubt, as the economy grows and develops, still other varieties of institutions will emerge to concentrate on the holding and trading of specific kinds of assets. No doubt too, in Canada as in the United States, for example, the growing degree of specialization will result in a diminution of the proportion of outstanding financial assets held by commercial banks. For, it we can judge by American data, the development of the capital market is characterized by a pyramiding of financial institutions, and a sharing of financial assets by the commercial banks with other institutions. In the United States, for example, Raymond W. Goldsmith estimates that in the century following 1850 the assets of commercial banks fell as a proportion of the total assets of financial intermediaries in the United States from three-quarters to slightly over one-third; while the assets of life insurance companies rose from some 3 percent to about 15 percent, and the assets of a miscellaneous group of institutions (saving and loan associations, credit unions, investment companies, mortgage companies, government lending agencies and personal trust funds administered by banks and trust companies) rose from 10 to about 20 percent.[3] We shall be interested in the financial institutions in part because they are the means of conveying a significant flow of funds from savers to buyers of capital goods, and from lenders to borrowers generally. But we shall also be concerned with the particular classes of savers and lenders from whom they obtain their funds and the particular classes of borrowers in whose liabilities they invest. The investment practices of the institutions, governed as they are by long-standing traditions in many cases, and by legal restrictions, materially affect the supply of credit to important groups of borrowers. Detailed attention will be given to some of the important institutions in Part IV below.

In many respects the capital market is a focal point of the capitalist economy. Decisions given effect in this market have a bearing of profound importance on the allocation of resources especially as between production of goods for more or less immediate consumption and production of capital goods which will enhance the output of goods of all kinds in the

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3 We have taken these data from Table 5 in Raymond W. Goldsmith, Financial Structure and Economic Growth in Advanced Countries: "An Experiment in Comparative Financial Morphology", published in *Capital Formation and Economic Growth*, National Bureau of Economic Research, Princeton, 1955, p. 142. The data are estimates for the years 1850 and 1949. Data for security brokers and dealers, such as finance and personal loan companies are not included in Goldsmith's figures. Further detail for selected years 1900 to 1949 may be found in Goldsmith's *The Share of Financial Intermediaries in National Wealth and National Assets, 1900 - 1949*, Occasional Paper 42, National Bureau of Economic Research, 1954. See also John F. Gurley and E. S. Shaw, "Financial Aspects of Economic Development", *American Economic Review*, Vol. XLV, 1955, pp. 515-38.

future. Thus decisions reflected in this market materially affect the rate of growth of output per head in the economy. Moreover they affect the scope for enterprise and the distribution of its fruits. Let us consider the functions performed by the capital market.

2. The functions of the capital market

Briefly, the functions performed by the capital market are the following: regulating the amount of money outstanding; conveying of funds from those economic units which spend less than their current income on goods and services to those which spend more; providing for liquidity of non-monetary financial assets, that is, the shifting in the ownership of outstanding liabilities; redirecting funds which seek reinvestment following repayment of outstanding obligations, and generally eliciting and allocating funds for investment in financial assets. We shall elaborate on each of these in turn.

In Canada, the amount of money outstanding with the exception of subsidiary coin is a liability of the Bank of Canada (Bank of Canada notes) or of the chartered banks (non-bank deposits in the commercial banks). At the end of December, 1956 the amount of money outstanding consisted of \$1.5 billion of Bank of Canada notes (apart from those held by chartered banks) and \$9.8 billion of deposits held in chartered banks by the "general public" and by the Government of Canada, making a total of some \$11.3 billion.[4] Changes in the amount of money outstanding are effected by the banking system by changing the amount and the composition of its assets and liabilities. Thus, for example, an increase in commercial bank loans in Canada will increase the amount of money outstanding as the proceeds of the loans are credited to the deposit accounts of the borrowers. Since to all intents and purposes the banking system, the central bank and the commercial banks, deal only in financial assets or liabilities, it is manifest without further elaboration that the capital market is the medium through which the stock of money outstanding is augmented or diminished. Monetary policy, which is primarily the concern of the central bank, governs the rate and means of expansion or contraction of the stock of money, but we shall not open this subject until later.

The second function performed by the capital market is the conveying of funds from those economic units with surpluses in their current accounts to those with deficits. This conveying of funds is accomplished in many ways: for example, the direct purchase of the obligations of deficit units by surplus units, with or without the services of a broker or dealer in such obligations; or the purchase of the obligations of financial institutions by economic units with surpluses and the investment of funds by these institutions in the obligations of deficit units.

In transferring funds from those whose current expenditures on goods and services are less than their current incomes to others in the opposite

4 The figures are taken from the Bank of Canada, *Statistical Summary*, February, 1957.

situation, the capital market contributes in a profound and fundamental way to the division of labour which is so imperative for high productivity in the economy. With the advent of the corporate form of enterprise and the machinery for marketing its securities self-finance became less necessary than in an earlier day and, accordingly, the opportunities for separating the function of supplying capital and the function of supplying managerial talent were enlarged. (The accompanying divorce of ownership from control has not been universally accepted as an unmitigated gain but that is another matter.) It is true that the emergence of corporate enterprise did not by any means eliminate self-finance even in those industries which the corporation came to dominate. As we shall see below, especially in Chapter 6, corporations supply a very large part of their own financial requirements through retained earnings and through depreciation allowances, and it is likely that this tendency is reinforced by the growth in the size and complexity of corporate structures and the amounts of real capital in their control on which depreciation is charged.[5] But though self-finance is still important in the modern economy the role of the capital market in conveying funds is too. Industrial corporations do a very considerable amount of external financing; that is of soliciting funds through the public and private issue of securities. Undoubtedly in financing many particular projects the corporation's own funds, while extensive, are not adequate and the essential marginal supply without which the projects could not be undertaken is obtained through the issue of securities. Moreover, though our statistics show corporate retained earnings and depreciation allowances as a very high proportion of total saving in the economy, the aggregative character of these statistics rather masks the extent to which corporations invest in the securities of other corporations either through the parent-subsidiary channel or at arm's length through the more open contacts of the capital market. This latter type of intercorporate finance appears to be growing in Canada. It is difficult to place in perspective such scattered pieces of information as we have; but it is quite clear that short-term intercorporate lending, at arm's length, is growing.

Of course, corporations are not the only organizations to which the market conveys the funds of savers. Governments are very often net borrowers and indeed government securities constitute a very large proportion of outstanding debt. We do not have very satisfactory figures of national balance sheets for Canada, and we cannot therefore compare government debt with total private debt or with private debt plus liabilities for capital stock of corporations, but the following calculation illustrates

5 Raymond Goldsmith estimates that the proportion of internal financing to total financing by non-financial corporations in the United States has varied since 1900 as follows:

1900 - 12	33 percent	1934 - 39	128 percent
1913 - 22	40 percent	1940 - 45	62 percent
1923 - 29	28 percent	1946 - 49	49 percent
1930 - 33	78 percent		

See "Financial Structure and Economic Growth in Advanced Countries . . ." in *Capital Formation and Economic Growth*, *op. cit.*, Table 8, pp. 147-48.

the point. The funded debt, direct and guaranteed, of the federal government (including treasury bills), at the end of 1957 amounted to $16.8 billion.[6] The outstanding direct and guaranteed bonds of provincial and municipal governments at the same date amounted to $8.1 billion.[7] The total of this estimate of government debt is therefore $24.9 billion. The amount of corporate and institutional bonds outstanding at the same date is estimated to have been $6.4 billion.[8] It has been stated that as of the middle of May, 1958, Canada's mortgage debt was "close to nine billion dollars".[9]

The following figures (in billions of dollars) for net domestic debt in the United States as of mid-1957 have been published in the *Federal Reserve Bulletin.*[10]

Federal government (net)	220	
State and local government (net)	46	
Total government (net)		266
Business (net)		190
Individuals — mortgage debt	94	
consumer credit	42	
other	10	
Total for individuals		146
Grand Total		602

In Part III below we shall cite other Canadian data for the post-war period that will illustrate the function of the capital market in conveying funds from those with current surpluses to those with current deficits. Let us remark now on the third function performed by the capital market, the function of providing liquidity for the holders of non-monetary financial assets. Owners of outstanding non-monetary financial items are constantly wishing to shift the distribution of these assets in their portfolios or to convert them into non-financial assets or money. These shifts and conversions are accomplished by sales of non-monetary financial assets in the capital market. The knowledge that these assets are marketable is an essential inducement to many buyers. Individuals and businesses want to be free not only to take advantage of changing relative rates of return in the financial markets, but to divest themselves of savings accumulated in

6 Bank of Canada, *Statistical Summary,* March, 1958.

7 Bank of Canada, *Statistical Summary,* March, 1958, p. 101.

8 *Ibid.*

9 Stewart Bates, President of Central Mortgage and Housing Corporation in an address entitled "Mortgage Financing —Threat or Challenge" delivered at the annual meeting of the Dominion Mortgage and Investments Association, Waterloo, Canada, May 15, 1958.

10 *Federal Reserve Bulletin,* December, 1957, p. 1355. Government debt figures exclude holdings of a government's debt by agencies of that government. Deposit liabilities, currency liabilities, trade payables in the form of extensions of book credit to business firms, and accruals such as tax liabilities and insurance reserves are excluded.

the form of non-monetary financial items in order to finance their own expenditures on cars, other consumers' durables and capital goods generally.

Just as the capital market makes it possible for owners of non-monetary financial assets to shift their portfolios or to convert these assets into money or non-financial assets so the capital market permits those liable for securities to extinguish these liabilities or to change their form. This is a fourth function performed by the capital market. There is always a stream of funds flowing into the capital market for the purpose of repaying or "buying back" debts or more generally for retiring securities.

Finally, and most important in this list of functions performed by the capital market, is the function of eliciting funds for financial investment and of allocating the funds forthcoming. Decisions to invest in non-monetary financial assets are based on expectations of rates of return on these assets in relation to advantages to be expected from other dispositions of wealth. The rates of return on non-monetary financial assets are determined in the capital market. The appraisal of these rates of return is facilitated by the dissemination of information concerning these rates and the forces determining them. Among the functions of some of the financial institutions in the capital market is the dissemination of such information. The allocating of the funds to borrowers constitutes support for the spending programmes of the borrowers and inasmuch as in this world of scarce resources not all would-be borrowers can be wholly satisfied at once, it falls to the capital market or to the lenders in the capital market, in substantial measure, to select the spending programmes to be supported.

The functions of the capital market in eliciting and allocating funds are of rather different character in times of depression than they are in times of full employment or inflation. While lenders must constantly search for promising expenditure programmes to support, in times of depression their problem and function is much more to find *some* programmes to support than to choose among a wide list of alternatives.

The consequences of the stimulating and rationing of the flows of funds through the capital market are most far-reaching, affecting as we have mentioned, the degree of employment of the economy's resources, the rate of growth of the economy, and the distribution of its income. The function of regulating these flows is shared with other markets and with economic policy-making bodies generally. We shall devote the next section of this chapter to the mechanism or methods by which the flows are regulated.

B. The Regulators of the Flow of Funds

The supply of funds to the capital market and the demand for funds from the capital market are regulated by the complex interrelations of a group of factors. In this group are governmental influences such as the

laws on investing practices, taxation laws, and the decisions of the authorities who control the management of the stock of money and public debts. Also included are more purely economic determinants such as the prices of goods, securities and foreign exchange. Finally, among the regulators of the flows of funds, we must recognize practices based upon custom or expediency which include various methods of deciding how to finance projects and how to ration credit. From this listing it may be inferred that the system of prices, while important in regulating flows, shares this function with policy makers, both public and private.

1. Government influences on the flows of funds

The decisions of the monetary authorities are of first rate importance not only among governmental influences but among all influences on the flows of funds in the capital market. Central bank policy is directed first and foremost at the capital market and is effected very largely through operations in that market. The Bank of Canada exerts much of its influence on the capital market through its own operations in one class of financial assets, namely Government of Canada securities. It may affect either the supply of or demand for Government of Canada securities through its sales and purchases of these securities in the "open market" [11] or through direct dealings with the Minister of Finance. The Bank acts as adviser of the government on questions relating to the management of the federal government's debt both on the timing of issues and retirements and on the character of the securities to be offered. The Bank's dealings in federal government securities affect the prices of these securities and hence their relative attractiveness as compared with other types of financial assets that investors may wish to hold. In addition the open market operations of the Bank have a direct effect on the deposits of commercial banks with the Bank of Canada. Since our banking legislation requires commercial banks to maintain at least a certain minimum reserve in notes of, or deposits with, the Bank of Canada against their own Canadian deposit liabilities, the open market operations of the central bank have a direct effect upon the ability of commercial banks to acquire non-central bank obligations for their portfolios.

In Canada, the central bank has certain other powers. Since 1954 it has had limited statutory authority to determine the minimum ratio of cash reserves to Canadian deposits which the commercial banks must maintain. The Bank has not yet altered this minimum ratio, however. The Bank has authority to deal in certain assets other than federal government securities. It may and does from time to time hold obligations of certain foreign governments, foreign exchange and gold. The Bank may and does from time to time extend loans or advances to the federal

11 Of course at any particular time the Bank of Canada may affect the market by *not* buying or by *not* selling securities. If any general statement can be made it would be to the effect that the Bank tends to be a net buyer when the prices of securities are falling and a net seller when the prices are rising, but even to this statement there are exceptions.

government, the chartered banks, dealers in the money market and Quebec savings banks. The Bank may but very rarely does buy or sell securities issued or guaranteed by a province of Canada. Though it may buy and sell certain bills of exchange and promissory notes endorsed by a chartered bank, this type of transaction has been of no importance. It is not empowered to deal in municipal securities or in corporate bonds or stocks.

Apart from open market operations the most important influence exerted by the Bank of Canada is through its powers of leadership, persuasion and exhortation. It was through the exercise of these powers that the banks were induced on three occasions in the post-war period to cease extending term loans to business.[12] By similar means the banks were induced to maintain after May 31, 1956, a minimum ratio of cash reserves, day loans and federal treasury bills to Canadian deposits. There have been other instances in which the Bank of Canada has persuaded the banks to adopt particular policies.[13] The Bank has not restricted its suggestions to the commercial banks, it has directed them as well to dealers in federal securities, finance companies, and the stock exchanges, for example, and more generally through its annual reports and speeches of its governors.

In summary, the influences of the Bank of Canada have not been restricted to the effects of changes in cash reserves of the chartered banks. The Bank's dealings directly influence the yields on Government of Canada securities and indirectly, to varying degrees, the supply of, demand for and yields on other kinds of non-monetary financial assets. An effect on the allocation of funds is thus induced by the changes in the structure of yields, but the Bank has, from time to time, sought to influence the allocation of funds rather more directly through discussions with suppliers.

Prominent among other governmental influences on the flows of funds in the capital market is taxation policy at three levels of government. Influences through taxation are myriad, affecting both the supply of funds and the demand for funds. We shall be content at this point with a mere reference to the more obvious of these influences.

The first and most obvious influence is that taxation of any kind serves to divert funds from the private channels of the economy to the support of government activities. The persistent widening of the scope of government activity reflects both an increase in public demand for services traditionally supplied by government and an increase in the supply by government of services that were formerly arranged for in the private economy if indeed they were supplied at all. In the former category are such services as those of schools, roads, waterworks, and public administration generally, while in the latter are a variety of social services such

12 Term lending is defined in the Bank of Canada's *Annual Report, 1955*, p. 17, as "making loans to business corporations where the time of payment is deferred beyond that of ordinary bank loans, or purchasing a security issue negotiated directly with the customer as distinct from buying a publicly issued security in the market".

13 The Bank of Canada has no power to *require* the commercial banks to do anything except that it may, within limits, set the minimum cash reserve ratio which the banks by law must maintain.

as pensions, family allowances, unemployment and health insurance and the services of new and newly nationalized enterprises such as broadcasting and various publicly-owned utilities. As a consequence of the extension of government activities, taxes have increased rather more than proportionately with income[14], so that progressively Canadians have "bought" more services and done more saving through tax payments. In this connection however, it should be remarked that not all government services are financed out of current tax receipts; government debt has also grown and we have already noted that it constitutes a very large proportion of outstanding non-monetary financial liabilities. It follows that an increasing amount of private saving has been diverted to government through the purchase of government securities as well as through the payment of taxes.[15]

The diversion of funds to government is not, however, the only influence of taxation on the flows of funds in the capital market. The progressive structure of the tax rates especially the personal income tax rates and estates tax rates by which those with highest incomes and largest estates pay taxes at the highest rates, combined with the regressive structure of transfer payments has led, as far as one can judge from the statistical and other evidence we have, to a reduction of the degree of inequality in the distribution of income among individual earners. Though the average level of income has risen persistently, this combination of a progressive tax structure and regressive structure of transfer payments has sharply restricted the ability of individuals or small groups of individuals to amass fortunes with which to finance major business ventures.

Taxation, both of individuals and corporations, is often said to impair incentives to undertake risky and arduous programmes. It is difficult to come to a clear view of the effects on incentive generally but on some aspects of the effects of taxation on incentives that bear most directly on the flows of capital funds it is less difficult. Special depreciation provisions, for example, designed to stimulate particular kinds of investment have a very considerable and appreciable effect on the allocation of capital funds. Even depreciation allowances not especially designed for their incentive effect, will, if they differ as among varieties of capital assets, affect the allocation of funds. Another example of the use of taxation to provide direct incentives is the 20 percent tax credit allowed persons on dividends from Canadian corporations.

The technical provisions of the taxation legislation have important effects on the flows of funds. For example, the fact that bond interest payments are deductible as expenses in computing income for tax purposes while dividend payments are not, has obviously been a very important

14 According to information published by the D.B.S. in *National Accounts: Income and Expenditure, 1926 - 1956*, total tax receipts of all governments in Canada averaged 13.2 percent of Gross National Product in the years 1926 - 29 and 22.8 percent in the years 1954 - 56.

15 Some government securities have been marketed abroad and have thus not made a direct claim on the private saving of Canadians.

consideration in those many cases in which corporations have chosen to raise new capital through bond issues rather than stock issues. The tax credit on dividends has worked in the opposite direction. The absence of a tax on capital gains has affected the technical character of the offerings of bonds in an effort to attract investors. To cite another example of this kind: the federal Department of National Revenue has for many years prescribed the conditions which must be fulfilled by pension plans in order that payments into pension funds may qualify for deduction from income for income tax purposes. From time to time the provisions are changed, and the flows of funds into pension funds and into pension fund investments are accordingly affected.

In concluding these brief remarks on taxation as a regulator of the flows of funds in the capital market we must observe that taxation very directly affects the prices of goods and services and, as we shall argue a few paragraphs below, these must be counted among the important regulators of flows in the capital market, inasmuch as profits and losses, which depend on prices, respectively attract and repel funds.

We have referred to the monetary and debt management policies of governments and to taxation laws as governmental influences on the flows of funds. In this same connection, we must now refer to laws and government regulations concerning the issue of securities and the investment in securities and other assets by financial institutions. Among the laws and regulations covering the issue of securities, we have in particular the securities acts of the various provinces which regulate the procedures and practices followed in the issue and trading of bonds and stocks. Broadly speaking the purposes of this legislation are to protect the investor from fraud and to provide borrowers with a set of rules of the game which, within limits, ensure that in their competition for funds they will encounter fair play. In accomplishing these purposes the legislation affects the flows of funds through the capital market. There is other legislation in company statutes, in corporation charters and in provincial law governing municipalities which limits corporations and municipalities in the types and amounts of securities they may issue.

There is important legislation on the statute books of both the federal and provincial governments which regulates the investment practices of financial institutions. Financial institutions are not regulated to equal degree however; some like the life insurance companies are rather closely regulated, while others, such as finance companies, are allowed much more freedom in their operations. In this class of legislation we must recognize first the Bank Act which specifies in considerable detail the business and powers of commercial banks in Canada. While this legislation gives the banks considerable leeway, it does limit bank investments to specified classes of assets. It does not, in general, specify the proportions in which these assets are to be held. An exception is of course the cash ratio, and

as has been mentioned, the Bank of Canada has induced the banks for the time being at least, to maintain a "liquid asset" ratio of at least 15 percent. There are other examples of cases in which banks have been induced to make investments of minimum amounts in particular assets, such as the undertaking given in the early spring of 1957 to invest an additional $150 million in government insured housing mortgages during 1957. The life insurance companies operating under federal legislation are restricted not only in the classes of assets they may buy but the legislation also contains several provisions concerning the proportions of total assets which may be invested in particular types of securities.[16]

Trust companies, mortgage loan companies, the Industrial Development Bank, small loan companies, licensed money lenders, and some other institutions are subject to legislative restriction either provincial or federal on their investment practices. The principal objective of this legislation has been to protect the buyer of life insurance, depositors and investors in banks, trust and loan companies, and customers of small loan companies and licensed money lenders. This objective is most desirable. But the legislation directed toward it has effects on the flows of funds in the capital market, and these effects will be of concern to us in this study. It is a question of considerable importance whether in all respects the legislation provides necessary protection in the way which is most consistent with the proper regulation of the flows of funds through the capital market.

The list of governmental influences on the flows of funds is a long one. There are others yet to be mentioned. There are the government guarantees of loans of various kinds, from the bonds of the C.N.R. and the bonds of the Hydro-Electric Power Commission of Ontario to the government guarantees of N.H.A. mortgage loans and loans made by the chartered banks under the Farm Improvements Loans Act. The last governmental influence we shall mention is that exerted by direct controls on the prices or yields of securities. There are several important illustrations of this type of influence including the statutory ceiling of 6 percent on loan charges by commercial banks, the statutory ceilings on the cost of loans made by licensed money lenders and small loan companies, and the ceilings, which are changed from time to time, on interest charges for mortgage loans extended under the provisions of the National Housing Act. These controls on the yields of loans represent a direct limitation of the operations of the second main class of regulators in the capital market, namely the prices of assets. We turn now to consider this group of regulators.

2. The price system

In a free market economy changes in the prices of assets, financial and non-financial, are accorded a very prominent role in adjusting the forces of demand and supply to each other and so in channelling economic

16 See below, Chapter 7.

activity generally. This performance of the price system we take to be widely appreciated and we therefore eschew detailed exposition here. In the securities markets, using the term broadly, widening differences in the yields of securities evoke shifts of funds into investment in securities whose yields have risen more (or fallen less) and away from investment in securities whose yields have risen less (or fallen more). To the extent that private funds are permitted to flow across international boundaries, yields in foreign countries combine with rates of exchange to regulate the international flows of funds and securities. As between Canada and the United States for example, some kinds of international capital movements in the post-war period have been very sensitive to changes in interest rate differentials between the two countries and to changes in the exchange rate.

An aspect of the regulation of the flows by the price system is the effect of changes in prices of real goods and services on flows in the capital market. While it is manifest that prices of non-monetary financial assets affect supplies of and demands for these assets, it may not be so clear that prices of goods and services are also important in this respect. But this latter fact becomes clear if it is remembered that on the one hand income receivers choose among all kinds of assets, both financial and non-financial, in allocating their income and consider the prices of the various kinds of assets, among other factors in doing so, and if it is remembered on the other hand, that enterprisers, in creating a demand for funds, are motivated in part by the prices they have received and can expect to receive for the goods and services they supply. By and large in the free market economy, the business enterprises that succeed in the competition for funds, that succeed, that is, in placing their securities at prices acceptable to them are those enterprises that offer the best security contracts and that offer the best promise of being able to fulfil the conditions of the contract. There are many factors that enter into buyers' judgments of the desirability of securities but the ability of the enterprise in the past to buy its materials and labour and sell its goods or services at profit-yielding prices is surely one of the most important. Indeed, one of the reasons new enterprises, launched by entrepreneurs starting in business, experience some difficulty in raising funds, is primarily because they have no record of past earnings to present to investors. To put this general point in another way, we may say that insofar as the production and distribution of goods in the economy is guided by changes in the relationships among the prices of those goods, so the supply of and demand for funds with which to finance the production and distribution of goods will be regulated by the prices of goods. More broadly, demands for and supplies of goods and securities each depend on prices both of goods and of securities.

We have mentioned earlier that business provides out of its own retained earnings a very considerable proportion of the funds it requires. In a very

real sense these firms raise capital in the goods market rather than in the capital market. To the extent that this practice is followed there is a direct circumventing of the capital market in the raising of business capital. This practice thus obviously influences the extent to which funds flow through the capital market. It also influences the channelling of funds through the market, inasmuch as firms which find their own saving adequate for their needs do not bid for funds and inasmuch as firms in the process of accumulating saving may be prepared to supply short-term funds, at least, to the market. The business enterprises best able to accumulate earnings are those best able to command prices for their products which yield profits. Thus in this indirect way too, prices of goods influence the flows in the capital market.

It is often argued that the circumvention of the capital market in the manner described in the last paragraph is to be regretted in that capital expansion financed out of retained earnings and depreciation allowances does not receive the critical appraisal and approval of investors. At least two observations must be made in connection with this argument. In the first place, many projects that are financed from retained earnings and depreciation allowances are only *partly* financed in this way, the balance of the funds required being obtained from new issues in the capital market. In these cases the projects are appraised by investors in the capital market. In the second place, projects financed wholly from retained earnings do have a market test albeit a test in the goods market rather than the capital market. If the expansion is one which involves duplicating existing facilities to expand production of goods of a kind already being supplied by the enterprise then it is doubtful whether the appraisal of investors, comparing this project with others, is likely to be more reliable than appraisal by the buyers of the goods who have compared them with others available and who have been willing to pay high enough prices to provide the capital for expansion. The testing of other projects involving new kinds of facilities for supplying goods already being marketed or goods never before offered for sale may be performed more reliably in the capital market than in the goods market. But one wonders what constitutes the skill of the professional investor and the underwriter. Is it skill in ranking projects by likely profitability or is it skill in ranking men and entrepreneurial groups? This writer is inclined to the view that the skill of the professional investor and underwriter lies essentially in judging men and not projects directly. We would concede that many factors enter judgments of entrepreneurs but certainly not the least of these is past performance in selling goods and services profitably.[17]

These two observations on consequences of the circumventing of the capital market by those concerns which rely on retained earnings and depreciation allowances are not to be interpreted as depreciating the

17 This matter is discussed more fully in Chapter 6.

function of the capital market in allocating funds. The new entrepreneurial group with no retained earnings can only appeal to the capital market for funds and its projects can only receive their initial appraisal in that market. Moreover, if there are limitations to the ability of investors to appraise projects there are also limitations to the appraisals of performances reflected in records of profit and loss. The price system in the goods market does not work perfectly. There are barriers to price movements and barriers to the operation of the price system in the goods market generally. There are not only supplementary governmental influences, just as there are in the capital market, there are varying degrees and kinds of monopoly.

In concluding our remarks on prices and especially prices of goods as regulators of the flows in the capital market we shall refer briefly to relative movements in the prices of goods generally on the one hand, and interest rates or prices of securities generally on the other hand. Consider, as an example, a condition in which the demand for goods and services at existing prices considerably exceeds their supply at those prices. Prices of goods and prices of securities are shown to be alternatives as regulators in both markets perhaps as clearly in this situation as in any. The counterpart to the demand for goods will be the demand for funds in the capital market. The excess demand must be contained. It may be contained either by rises in the cost of funds or rises in the cost of goods and services or by both. In the absence of monetary controls to the contrary it seems much more likely that in short periods the supply of funds can be augmented to meet the demand for funds than that the supply of goods can be increased to meet the demand for goods. The supply of funds may be augmented through the readiness of sellers of goods to supply credit, the readiness of others to convert deposits into securities and the readiness of banks to extend credit. The supply of funds may be increased with only moderate increases in yields and to the extent that such is the case, prices of goods will bear the brunt of the task of restraining demand in both the goods market and the capital market. If on the contrary, through the actions of monetary authorities or otherwise, the expansion of credit is restrained, rises in the cost of credit will share with prices of goods more of the burden of restraining each wave of excess demand in both markets. This paragraph raises the question of the control of inflation and begs a number of other questions to which we shall revert below, but we must now complete our review of regulators of the flows of funds by referring to those non-price regulators that arise from the practices of non-governmental bodies in the capital market.

3. Other regulators

We have referred to regulators of flows of funds which are imposed by legislation or that are implicit in the acts of public authorities and we have referred to the price system as a regulator. But there are other regulators that are neither prices nor decrees of government.

Paralleling legislation concerning the issue of securities and investment practices of financial institutions we find traditions and customs also regulating flows of funds. Particular types of borrowers traditionally borrow with the use of particular instruments. Particular types of lenders traditionally invest in restricted classes of assets and divide their portfolios according to particular patterns. We shall examine these customs and practices with more care in later chapters. Suffice it to observe here that while traditions and customs of this kind change, they change very slowly and they have a considerable impact on the flows of funds. In some cases they draw support from legislation though they may restrict the range of practice even more.

Paralleling price as a feature of a security contract there is a vast array of other features of contracts which contribute to the relative attractiveness of securities and hence to the allocation of funds in the capital market. Among these other features are the dates of maturity of the security, provisions for retiring the security, and provisions for fixed or variable annual returns. In addition to features that are part of the formal contract there are differences among securities in terms of the likely riskiness and likely liquidity of the security. All of these features of the security must be considered by the investor in making his choices. It is true that the price offered by the underwriter and the prices prevailing in the markets for outstanding issues will reflect these qualitative differences among securities. But probably prices will reflect these differences imperfectly and the more so on issues that trade infrequently. There are important instances in the capital market of securities which are not traded at all and the issuer places his note or security successfully only if he happens to be at the head of the queue or satisfies the requirements of the non-price rationing system, whatever it may be, that is operated by the lender. The banks, for example, in allocating funds among borrowers in a particular class judge whether to take up the note being offered, not only on the basis of the yield written into the contract, but also on the basis of their view of the credit worthiness and other characteristics of the borrower (not to mention the condition of their own portfolios).

This completes our statement on the regulators of the flows of funds. There are a great many regulators; they range in character from those which change only slowly and gradually such as traditions and customs, to others like the yield on Government of Canada treasury bills which bobs ceaselessly up and down as the bills find or lose favour with fickle, sensitive investors. Some non-price influences operate through the price system as is the case with open market operations of the central bank; others operate in restraint of the price system as is the case of legislation fixing or limiting the yield on loans of particular kinds; still others operate outside of the price system to supplement control by prices as is true of a variety of *ad hoc,* selective control measures introduced from time to time

by central banks. There can be no doubt that in Canada at the present time the price system plays a very large role in regulating the flows of funds in the capital market; equally, however, there can be no doubt that the price system shares its honours. These facts must dominate our approach, in the next section of this chapter, to the problem of formulating the criteria by which the performance of the capital market may be judged.

C. Criteria for Appraising the Capital Market

1. Statement of the problem

In this study we propose to examine the financing of economic activity in Canada in many of its aspects with a view to forming an opinion on the strengths and weaknesses of our present practices and patterns in the capital market. But practices and patterns can only be adjudged to have strengths or weaknesses against some criteria. It therefore behooves us to attempt early to formulate and explain the criteria by which we shall assess the features of the Canadian financial machinery which will be described in Parts II, III and IV following. Let neither the writer nor the reader be deluded however into thinking that this is an easy task. It is not. We shall try to explain why it is not an easy task before we set forth the point of view that we shall adopt and the specific criteria that are implied by it.

We have described the functions of the capital market, and we have classified the regulators of the flows of funds in and through the capital market. The capital market is an important part of the economic system, which in turn is an integral part of the total social organization which we variously refer to as the community, the nation or the country. Public and private policies alike may be conceived to be directed to achieving broad social objectives. From the widest point of view therefore, we may state the problem of assessing the functioning of the capital market to be that of deciding in what particular respects the practices followed in this market do and do not contribute to the accomplishment of these objectives.

When the country is engaged in some all-consuming national effort, such as fighting for survival in modern war, issues are much sharper and clearer, and the character and priority of objectives are much more readily perceived. Accordingly it is for such periods that the appraisal of any aspect of social organization and in particular the capital market is easiest or, better, least difficult. However, our task is not to appraise the functioning of the capital market in wartime; we must appraise its functioning in times of peace.

In times of peace national objectives are not clearly perceived and there are ordinarily substantial divergencies of view as to what the objectives are. Disagreement is probably wider as to the priorities to be accorded objectives which implies that objectives conflict. For example,

while there would no doubt be wide agreement that immediate increases in consumption per head and in capital formation in industry are both to be regarded as national economic objectives, there must be much less agreement as to which of these alternatives is to be given priority and to what extent. Moreover, it must be expected that priorities will change with changing conditions and changing fancies. The lack of clarity as to objectives, the disagreements on priorities of objectives, and the changes in objectives and priorities all combine to make it impossible to approach the task of appraising the capital market confidently and tidily by setting forth a list of objectives in a *given* order of priority against which to judge the market's performance.

The task of settling on objectives is complicated by the knowledge that high among social objectives is the objective of emphasizing particular methods of social organization. Methods of organization become objectives in themselves. In modern western democracies, the organization of economic activity through the (more or less) freely operating price system has been viewed as more than a means to an end; it has been regarded as an end in itself, albeit an end to be ranked against other social objectives.[18]

However, though there are difficulties, and though there will inevitably be differences of opinion over whatever interpretation of objectives is adopted, it is imperative that any segment of the social organization be judged in the light of over-all objectives conceived for the social organization. Fundamentally our problem in appraising the capital market in any period must be to judge the performance of the regulators of the market relative to the functions to be fulfilled in the light of the objectives to be achieved in that period. We have described the functions, we have identified the regulators; we must take a position with respect to objectives, difficult and controversial though that may be.

2. The objectives of policy

It is not impossible to specify a group of broad social or economic objectives which, throughout the post-war period we shall examine, have had high priority ratings. We feel confident that these objectives must be in our list inasmuch as they are supported by all political parties though undoubtedly with varying emphasis. The platforms of political parties are not infallible indicators of social objectives but in democratic societies political parties must, in seeking power, strive to interpret the will of the people.

Far up on the list of objectives must be placed that of maintaining high levels of employment and that of containing inflation. This twin objective was set forth explicitly in the White Paper on Employment and

18 Some might wish to argue that methods of organization must not be classed as ends, that fundamentally they are means to ends; that the organization of the economy through the price system is the means selected to gain the objective of freedom, for example. The reader may prefer therefore to express the thought in the text differently. If freedom has high priority among social objectives and if society chooses a particular mode of organizing economic activity as a means to this end, this choice remains an important consideration against which the history of the capital market must be judged.

Income presented to Parliament in 1945 and it appears to command general support throughout the country. We shall have frequent occasion to examine changes in the regulators of the capital market flows, in relation to this objective.

Ranking close to this objective is that of promoting economic growth. Indeed, economic growth is enhanced both by maintaining employment and by avoiding inflation.

Another broad social goal in this country has been to ensure minimum standards of welfare. Accordingly government programmes of assistance for persons who are unemployed, aged, sick, indigent, or merely parents, have been introduced or extended. This broad goal also is supported by all parties though of course the emphasis given it varies.

It has also been widely accepted as desirable that governments should assist in directing a rather large proportion of the fruits of production to the defence of the nation and to the accumulation of social capital. While defence expenditures are now a lower proportion of gross national expenditure than they were at the end of the war, annual expenditure on investment in social capital is a larger proportion. Roads, schools, hospitals, residential housing, waterworks, public buildings, these have been sought with a consistently high degree of urgency throughout the post-war period.

Within the limits imposed by these objectives (and perhaps others to be referred to from time to time below) and subject to certain restrictions of the kind imposed by food and drug acts, it has been a social objective that the Canadian people be allowed to decide themselves what they shall consume and what they shall produce and to express these decisions in the market place rather than the polling booth.

There are other objectives, some less clear, others more fleeting. To some of these we shall refer in chapters below as we comment on specific events. Given these objectives stated above, what shall we be looking for as we review the practices and patterns in the capital market in the post-war years? What are the specific indicators that will assist us in forming an assessment of the "performance of the capital market regulators relative to the functions to be fulfilled in the light of the objectives to be achieved"?

The five broad objectives we have cited fall into two groups, the first four in one group and the fifth standing alone in the second group. With respect to the first four objectives our indicators will be the records of employment and prices, of output, of standards of welfare achieved, of the accumulation of social capital we have accomplished and the like. Since the direct bearing of the capital market on these objectives is not the same for all, we shall devote more attention to some than others. In particular most frequent

reference will be made to the objectives of maintaining employment, of containing inflation, and of promoting economic growth.

The fifth objective as it has been stated is to emphasize a method of organizing economic activity. Let us be frank in stating our intentions: our appraisal will be related most specifically, although not exclusively, to this fifth objective. We shall set forth the conditions under which the price system is likely to be most effective as a method of organizing economic activity. Having set these conditions out we may then, in the course of our study, enquire whether and to what degree these conditions are satisfied. But there are limitations to the effectiveness of the price system in practice. Where some of these limitations have been experienced, alternative regulators will have been put into operation. With respect to such cases, our question must always be: have the alternative regulators been necessitated by ineradicable limitations of the price system and in any event are they the best arrangements relative to the over-all objectives. Finally, where some limitations have been experienced it will be found that no alternatives or improvements have been introduced. Such cases will have to be counted among the weaknesses of existing practices and patterns. In the previous section of this chapter, in discussing the price system as a regulator of the flows of funds in the capital market, it was emphasized that prices of goods as well as prices of securities served as regulators in this market. In spite of this we cannot focus on problems over the whole price system. For example the impact of monopoly on the effective operation of the price system cannot be given systematic examination here. Oblique references to this and similar matters will be made from time to time however.

3. Conditions which enhance the effectiveness of the price system

Let us turn now to a brief statement of the conditions under which the price system is likely to be most effective as a method of organizing economic activity especially economic activity that involves trading in non-monetary financial assets. In the first place it is necessary that there be fairly continuous trading in substantial volume in the assets that are exchanged in the capital market. If this condition is satisfied then the price quotations on the asset are more informative in the sense that they are a much better indication of the price at which the asset could be bought or sold at the moment. We shall stress the importance of information in the market again below. If there is a continuing active market in an asset, that asset is more liquid in the sense that a decision to sell or buy if effected immediately can be effected without inducing a substantial change in price. (The definition of liquidity must be made relative to the proportion of the outstanding stock of the asset that is being offered or sought by a single transactor in a single transaction, but perhaps the language we have used is sufficiently precise for our immediate purposes.) Liquidity of assets is necessary if holders of assets are to be able and willing to shift their

portfolios in response to changes in relative prices in the market. This condition implies that in general there must be secondary markets in outstanding non-monetary financial assets, and these markets must be active. There can be exceptions to the condition without implying serious impairment of the price system as a regulator. For example holders of particular assets who wish to acquire other assets may be able to borrow against the assets they hold in order to finance the acquisition of others. But liquidity achieved in this way is likely in practice to be of lower degree than that which would be obtained if the asset were disposed of in an active secondary market, inasmuch as the cost of the funds borrowed is likely to vary directly with difficulty of selling the asset offered as collateral.

A second condition enhancing the effectiveness of the price system as a regulator of flows of funds is the willingness to shift supplies of funds in response to changing demands and to shift demands in response to changing supplies. This condition may be expressed alternatively as follows: both demands for and supplies of particular assets traded in the capital market must be responsive to their prices (or conversely to their yields). Otherwise changing conditions of demand or supply are not reflected in prices and cannot through their effects on prices evoke the necessary responses of supply and demand respectively. For example, if particular borrowers make, or expect to make, very large profits on their invested capital, and if in addition increases in the cost of borrowed funds can be offset partly by deductions from income for income tax purposes, they may be most unwilling to scale down their demand for funds in the face of increases in the cost of funds. Similarly if lenders suffer from a kind of inertia or from a lack of information they may be unresponsive to changes in relative prices of assets and thus the supply of funds may be relatively insensitive to price changes. The more responsive are suppliers and demanders of assets in the capital market to changes in prices, the smaller will be the amplitude of price movements in the market and the more effective will price changes be in eliciting flows of funds and in allocating them among demanders.

A third condition for the effective operation of prices in the capital market is the following: there must be no direct controls on the prices of individual assets. It is surely axiomatic that if prices are to operate as regulators they must be free to move since it is only through movement that they can regulate. If the yield on a particular security is kept by direct controls from rising when the offering of these securities at the existing price continues to rise, there can be no curtailing of the offerings through price declines. In addition if yields on some other securities happen to be rising it may well be that the flow of funds to those offering the securities on which the yield is controlled will dry up dramatically. This situation pertained in the market for N.H.A. mortgages in Canada in the latter part of 1956. Similarly in the same period the ceiling on yields of bank loans

prevented rises in these yields from restraining the increase in demand for funds from this source. If important prices or yields in the capital market are restrained from moving in any direction in response to the pressures of supply and demand, substantial distortions in the flows of funds may result and necessitate the introduction of other regulators.

A final condition, not unrelated to the first two we have stated, is that the non-price barriers to supplying funds and to obtaining funds must be kept as low as possible. These barriers may take many forms and we shall only cite three illustrations here. Suppliers of funds may be restrained by law or by custom from investing in certain types of assets or from investing more than a certain proportion of their portfolio in these assets. Such restraints constitute barriers to the movement of funds and serve to insulate segments of the capital market from developments in other segments. Specialization of institutions in the capital market may well spell compartmentalization of the market and the price system cannot operate effectively to allocate funds if the market is highly compartmentalized. Effective allocation by the price system requires that supplies of and demands for any asset be responsive not only to the price of that asset but also to the prices of a fairly wide range of other assets. Borrowers may also be restrained by non-price barriers. For example, some classes of borrowers may be quite unable to gain access to the funds supplied through certain channels. It is often alleged that entrepreneurs wishing to raise small amounts of capital are at a considerable disadvantage in seeking to raise funds through a public issue of securities because of the high underwriting costs per thousand dollars of funds raised on small issues.[19] If non-price barriers of this and other kinds significantly restrict borrowers in the segments of the capital market to which they can have access, the capital market cannot adequately perform its role as allocator of funds. A barrier which may operate on either side of the markets for non-monetary financial assets is the barrier of ignorance. If the fullest possible information respecting the opportunities available to buyers and sellers is not widely disseminated, buyers and sellers cannot act in response to those opportunities. This is manifest; and we must, in reviewing the functioning of the market, examine the flow of information with care. There are many aids to the dissemination of information; we have already referred to prices themselves as bearers of information; honest brokers, a vigorous and perspicacious financial press, the publication of detailed and accurate prospectuses, balance sheets, and income statements, and a sophistication on the part of buyers and sellers in the market are all aids to the spreading and interpretation of information.

4. Limitations of the price system

There are of course limitations to the operation of the price system. Some of these limitations show up in a failure of the conditions we have

19 Perhaps it is a misuse of language to call high underwriting costs a non-price barrier; we shall, however, use this classification of the problem cited.

cited to be met, and of these we need not say more in this chapter. We must refer explicitly, however, to two other limitations of the price system before concluding.

One limitation of the price system arises from the vital part played by expectations in determining the responses of buyers and sellers to changes in prices. The point is rather subtle, but can perhaps be put as follows. Under some circumstances a price change may serve rather more as an "agitator" than as a regulator. If it serves as a regulator a rise in an asset's price evokes a decrease in the amount of it demanded and an increase in the amount of it supplied. However, if a rise in price evokes an expectation of a further rise it may evoke an increase in the quantity of it demanded and no increase or perhaps restriction in the amount of it supplied. Converse statements may be made with respect to a fall in price. If a change in price evokes expectations of further changes in the same direction economists refer to the market in that asset as "unstable". Instability of this kind is by no means uncommon; on the contrary it is a frequently observed characteristic of markets at the beginning and during the early part of price movements in a given direction. In general, however, prices do not continue to move in a given direction at a given or accelerating rate indefinitely, a fact which testifies to the ultimate stability of markets. The short-run instability may delay the emergence of the regulatory effect of prices and where such delays frustrate the attaining of one or other of the over-all objectives, the performance of the price system must be adjudged to be unsatisfactory and to warrant the adoption of supplementary regulatory measures. Contributions from this source, the instability of markets, to the delay in the responses of buyers and sellers that are necessary for effective regulation through the price system are very likely to appear as a problem for the monetary authorities charged with controlling the over-all stock of money in the economy, a matter to which we now turn very briefly.

A second limitation of the price system in general arises in part at least from the first we have mentioned. This limitation is the apparent inadequacy of the price system (we refer explicity now to prices of all kinds of assets) as a sensitive regulator of the *general* level of economic activity. The long record of cycles in business activity is too well known to require any introduction here and we take it as evident that in this respect, if the objective of maintaining high employment and containing inflation is to be achieved, the price system will need to be supplemented by other regulators of economic activity. However, we would make the point that the extent to which such supplementary regulators can operate through the capital market and especially, through the price system in the capital market, depends very largely upon how severe are the other limitations of the price system in practice. Thus, the issue of whether credit controls exercised by the central bank or other agencies of the government should be confined to operations in the open market in government securities or include

a battery of "selective controls" directed at particular segments of the capital market and traders in those segments will be very greatly illuminated by recognizing the precise limitations of the price system in practice and by determining the possibilities of removing these limitations. If the markets in the various financial assets are closely interrelated and if responses to price changes are not only real but rapid, in short, if the conditions given above for the effective operation of the price mechanism are very largely met, then central bank policy effected through open market operations in government securities is likely to be an adequate supplement to the price system in serving the objectives of price and employment stability. Much of traditional central banking theory is predicated upon a price system in which our conditions are fulfilled.

D. Summary

This completes our statement of the problem of developing criteria for appraising the capital market. We have tried to direct attention to the difficulties and we have tried to be frank and explicit about our proposals for dealing with them. We have stated what we shall assume to be broad social or economic objectives in the light of which the performance of the market is to be judged. We have set forth the principal indicators that we shall study in reviewing the development of the market in the post-war period. Our attention will be concentrated on but not restricted to the conditions which contribute to the effective operation of the price system in the capital market of the economy. We shall be looking to see whether the conditions have been met and if not, whether adequate improvements in the conditions or supplementary arrangements for the regulation of the flows in the market have been introduced. In summary we approach our task with the view that the need for props and alternatives to the price system in the capital market will, in the light of the objectives we have stated, be least if in the capital market there is continuous and active trading in all or most assets, if suppliers and demanders of funds are responsive to price changes, if prices of financial assets are free to move, and if the non-price barriers to the supplying of funds and the obtaining of funds are low.

PART II

INCOME EXPENDITURE AND FINANCE IN CANADA IN THE POST-WAR PERIOD

3

THE NATIONAL TRANSACTIONS ACCOUNTS

A. Introduction

National Transactions Accounts for Canada are presented in this study for the first time. The accounts display, in a systematic way, the annual value of the transactions in real goods and services and in financial assets that are made by each of various groups of transactors in the economy. These accounts provide much, though not all, of the basic data needed to study the financing of economic activity and we shall make extensive use of them throughout the rest of our discussion of this subject. In this chapter we shall give a very brief description of the structure of the accounts, preparatory to analyzing their contents in subsequent chapters. The technically inclined reader may find in Part VI of this study a detailed discussion of the accounts and the sources of and methods of deriving the estimates they contain.[1]

The National Transactions (N.T.) Accounts for Canada have been designed as a logical supplement to the official national accounts published from time to time by the Bureau of Statistics in the series *National Accounts: Income and Expenditure*. In this they differ from some other systems of accounts in the same family that have recently been developed. In particular, they differ in this respect from the accounts presented by Morris A. Copeland in *A Study of Money Flows in the United States* (New York, 1952) and by the Federal Reserve Board in *Flow of Funds in the United States 1939-1953* (Washington, 1955). In the Canadian accounts, all the transactions that are included in the national accounts are included in the N.T. Accounts. Thus imputed transactions and accrued income and expenditure are deliberately treated in the same way in the N.T. Accounts as in the national accounts. A particular consequence of this uniformity of treatment is that gross saving by consumers, business and the rest of the world, and the current surplus of governments are identical in the two sets of accounts.

1 An authoritative and concise statement of the theory and history of the accounts may be found in L. M. Read, "The Development of National Transactions Accounts: Canada's Version of a Substitute for Money Flows Accounts", *Canadian Journal of Economics and Political Science*, Vol. 23, 1957, pp. 42-56.

The N.T. Accounts owe much to other statistical series in common use in Canada. Among these is the balance of payments which was the first "national account" in Canada to include transactions in goods and services and in financial items in the same account. Our balance of payments statistics have been developed to their present excellent state over many years and they appear in somewhat rearranged form in the N.T. Accounts as the so-called "Rest of the World" account. The direct estimates of personal saving in Canada, which have been published in the Bank of Canada, *Statistical Summary*[2] purport to show transactions in *all* kinds of assets for the consumer sector. The concepts underlying these estimates and the figures themselves have been helpful in developing the account for the consumer sector presented here. In addition to the national accounts, the balance of payments, and the direct estimates of personal saving, a great variety of statistical information has been drawn upon. This includes the accounts of federal, provincial and municipal governments and crown corporations, the information contained in the annual *Taxation Statistics*,[3] the annual reports of the federal superintendent of insurance and of the federal and provincial authorities regulating trust and loan companies, and the accounts of the banks, The Bank of Canada, and other financial institutions in the capital market. Indeed it is the integration and systematization of this great mass of statistical information that is one of the principal merits of the National Transactions Accounts.

B. The Structure of the Accounts

The National Transactions Accounts provide a two-way classification of transactions. Each transaction involves an exchange of two different items. The first basis of classification, is the character of the item offered or taken in exchange and accordingly items exchanged have been classified into *categories*. Each transaction involves two transactors. The second basis of classification is the character of the transactor and accordingly transactors have been classified into *sectors*. Transactions are thus classified according to the categories of the items exchanged and according to the sectors of the transactors.

The classification of transactions by items exchanged, distinguishes (a) current transactions, (b) investment transactions, (c) financial transactions and (d) other transactions and errors. The list of categories of transactions is shown in Table 3.1. The headings of the categories are self-explanatory for the most part. "Labour service" refers to the value of labour service given and taken in exchange. "Capital service" refers to the value of the services of capital, real or financial, given and taken in exchange and is measured by interest dividends and net rents. "Proprietors' service" is measured by the net income of unincorporated enterprise. "Transfers"

[2] Bank of Canada, *Statistical Summary*, July 1955. See also D. J. R. Humphreys "Personal Savings in Canada: Direct Estimates, 1939-1953" in American Statistical Association, *Proceedings of the Business and Economic Statistics Section, Papers Presented at 114th Annual Meeting, September 1954* (Washington, 1955).

[3] Published by the Department of National Revenue.

refer to transactions in which there is no *quid pro quo* apart from some intangible such as good will. Transfers include gifts, taxes and social insurance payments. In the category "claims on associated enterprises" is included changes in claims of parent companies on their subsidiaries, in claims of governments on government enterprises and in claims of consumers on unincorporated enterprise. The claims of consumers on unincorporated enterprise represent the net increase in proprietors' equity in unincorporated businesses; this net increase is treated as an increase in the liabilities of the enterprises and of the assets of the owners, just as if the increase in equity were evidenced by an increase in shares outstanding. The category "other transactions and errors" includes transactions in goods (apart from inventories as defined in the national accounts) that are not currently produced, changes in receivables and payables, changes in certain special deposit and trust accounts and some miscellaneous unclassified transactions as well as a balancing item for most sectors. We shall comment further on this category below.

The classification of transactions by transactors distinguishes eleven main sectors, though information has been prepared on a considerable number of subsectors, especially within the banking and "other financial institutions" groups. The list of sectors is given in Table 3.2. The most difficult problems of classification arise with respect to the separation of consumers and unincorporated business. The criterion of classification of transactors is institutional — we have sought to group transactors as decision-makers by the institutions within which their decisions are taken — and for the most part separate accounting records for these institutional groupings are available or may be constructed. But it is a fact that the accounts of many households are inseparable from the accounts of the unincorporated business enterprises in which members of the household are proprietors. The accounts are not distinguished in practice in many instances, and it is arbitrary in the extreme to force a separation. To be quite precise a proprietor may not keep separate bank accounts for his business and for his personal affairs, he may not distinguish business income from personal income. This sectoral indeterminacy[4] is a problem for the statistician and the analyst that must be handled by accounting conventions. Those that have been adopted in the N.T. Accounts are consistent with those adopted in the official national accounts. Thus, the net income of unincorporated business is considered to be paid in full to the proprietors as consumers so that net business saving for such business is deemed to be zero. Similarly, as we remarked earlier, the increased equity of proprietors in unincorporated business is accounted in the category "claims on associated enterprises" as though it were evidenced by an increase in capital stock outstanding. In like manner, increments in financial assets and liabilities are attributed to the proprietor as consumer if it is not clear that the changes are of a business character. Finally in this

4 As Read has called it, see "The Development of National Transactions Accounts", *op. cit.*, p. 49.

connection — and this point must be emphasized to avoid confusion — persons who occupy their own houses are assumed to rent as proprietors of unincorporated business to themselves as consumers.

Table 3.1

CATEGORIES OF TRANSACTIONS

A

Labour service
Capital service
Proprietors' service
Transfers including taxes
Goods and services, n.e.i. (net)

B

Change in inventories
Gross fixed capital formation

C

Currency and deposits
- Gold
- Currency and bank deposits
- Other institutional deposits

Charge accounts and instalment credit
- Consumer charge accounts
- Instalment credit

Loans
- Bank loans
- Other loans

Claims on associated enterprises
- Non-corporate
- Corporate
- Government

Mortgages
Bonds
- Government of Canada bonds
- Provincial bonds
- Municipal bonds
- Other bonds

Stocks
Insurance and pensions
Foreign inheritances and migrants' funds

D

Other transactions and errors

Table 3.2

SECTORS — GROUPS OF TRANSACTORS

Sectors	Sub-sectors
I Consumers	
II Unincorporated business	
III Non-financial corporations	
IV Government enterprises	Federal enterprises Provincial and municipal enterprises Operation of government buildings
V Banking	Bank of Canada Exchange Fund Chartered banks
VI Life insurance	Canadian federal companies Provincial companies British and foreign companies
VII Other financial institutions	Quebec savings banks Credit unions Government savings institutions Trust companies Mortgage loan companies C.M.H.C. and V.L.A. housing Other government lending institutions Instalment finance companies Small loan companies and licensed money lenders Investment companies Fire and casualty companies Fraternal benefit societies Government insurance institutions
VIII Federal government	
IX Provincial governments	
X Municipal governments	
XI Rest of the world	

A double-entry account is established for each group of transactors (sector or sub-sector). In general, purchases of goods or services are recorded as debits for the sector making the purchase; sales of goods or services are recorded as credits for the sector making the sale. With

respect to financial transactions, the accounting rules can best be expressed with reference to assets and liabilities. If a sector increases its holdings of what is for it a financial asset, this increase is recorded as a positive *debit* for that sector. Conversely, if a sector decreases its holdings of what is for it a financial asset, this decrease is recorded as a negative *debit* for that sector. For any financial category and any sector, only net debits (positive debits less negative debits) are shown. Similarly, if a sector changes its liabilities in any financial category, an increase is recorded as a positive credit and a decrease as a negative credit. For any financial category and any sector only net credits are shown. While negative debits have been netted against positive debits, and negative credits against positive credits, there are only a few cases in which because of the scarcity of data it was necessary to show debits less credits in any category for a particular sector.

In the usual case a transaction involves two transactors and two categories of items exchanged. Accordingly the accounting for a transaction normally involves *four* entries in the accounts. For example, consider the case in which consumers buy $100 worth of goods from business, paying for them with a cheque drawn on their bank deposits. In the category goods we debit consumers and credit business each with $100, and in the category bank deposits we enter minus 100 in the debit column of consumers and plus 100 in the debit column of business. Or again, consider the payment of taxes by consumers to the government with a cheque drawn on consumers' bank accounts. The category taxes is debited for consumers and credited for government, and in the category bank deposits we enter a minus debit for consumers and a plus debit for government. This quadruple entry for each transaction ensures that in principle (that is apart from errors of estimation) we shall obtain balancing accounts for each sector and equal totals of debits and credits, all sectors considered, for each category.[5]

The transactions that are classified in these accounts include, in principle all those that involve exchanges between separate economic units of items that have economic value. We have remarked earlier that the accounts are not restricted to transactions that involve money or credit; thus actual or imputed barter transactions that are included in the national accounts are included in the N.T. Accounts and on the same basis. Similarly accrued income and expenditure are included in the N.T. Accounts as in the national accounts. But what of intra-sectoral transactions, have they been eliminated? More technically, are the sector accounts on a combined or consolidated basis? The answer is that where data have permitted we have shown intra-sector transactions. It was our object to show accounts on a combined

[5] There is one important qualification that must be offered. New real capital goods are recorded as a current sale in the category "goods and services, n.e.i." and as purchases of investment goods in categories "additions to inventories" and "new fixed capital". The totals of debits and credits, will not be equal for any one of these three categories considered separately, but they will be equal for all three categories taken together.

basis, but not to show purely bookkeeping transactions in the accounts of a single transactor (such as charges to reserves by a single firm). Thus, for example, payments by consumers for the direct purchase of labour services are shown, but lacking data we have been unable to record loans or gifts by one consumer to another. Similarly, we have recorded the sale of capital goods by one business to another, but we have not shown transactions in intermediate goods. Transactions between banks are recorded, but not transactions between non-residents. The rest of the world account is however on a consolidated basis and deliberately so.

This completes our sketch of the essential features of the accounts. The accounts record, so far as existing data permit, estimates of the values of items exchanged among separate economic units. Each recorded transaction contributes four entries in the accounts, two for each of the two items involved in the exchange. With respect to goods and services, purchases are recorded as debits for the buyer and sales as credits for the seller, while changes in financial assets are recorded in the debit column and changes in financial liabilities are recorded in the credit column of the sectors involved. Balancing category accounts and balancing sector accounts result from this two-way classification of national transactions.

The form in which the accounts are presented in this book requires further comment. In fact the accounts are presented in two forms; the one, as full as the data by categories will allow, is used in Part VI; the other, an abbreviated form, is used in Chapter 4. We shall explain the full form first and then the abbreviated form.

The reader will recall that in Table 3.1, above, we showed the categories of transactions as divided into four groups. This grouping corresponds to the division of each sector's account into subsidiary accounts. In the first subsidiary account, called the current transactions account, receipts from sales of currently produced goods and services are recorded as well as expenditures, apart from investment expenditures, on such goods and services. Transfer receipts and payments are also recorded here. The balance of these transactions comprises the gross saving of the sector as this concept is defined in the national accounts.[6] Gross saving is of course *net* in the sense that it is the algebraic sum of the gross saving of all transactors in the sector; gross saving for some transactors may be negative. We do not show current transactions accounts for every sector; as a matter of expediency all the business sectors (Sectors II-VII in Table 3.2) have been combined.

In the second subsidiary account, the investment transactions account, which is shown for each sector, gross saving is shown as a credit, and set off against this as debits, are the investment expenditures on inventories or new fixed capital made by the sector. The balance, saving less invest-

6 The residual error of the national accounts is included in the saving of the business sector and in particular, in Sector III, non-financial corporations.

ment, is entered as a debit, thus formally closing the account. The balance of saving less investment, if positive, shows the *net* amount that each sector had available in any year for the purchase of existing real assets or financial assets from other sectors, and, if negative, shows the *net* amount that each sector had to raise in any year through the sale of existing real assets or financial obligations to other sectors.

In the third subsidiary account for each sector, the financial transactions account, the balance of saving less investment is entered as a credit. Net increases in financial assets and net increases in financial liabilities are also recorded, and non-balancing totals of debits and credits struck. The balancing item is shown in the fourth group of transactions which includes miscellaneous transactions, transactions in categories for which information is incomplete and a residual. Information on general receivables and payables and on transfers of existing goods is so meagre for some sectors that we felt obliged to show it as part of the balancing item rather than in separate category statements.

The abbreviated form of the accounts used in the next chapter combines accounts for some of the sectors and some of the categories. In particular, only the following sectors or groups of sectors are distinguished: consumers, non-financial business, financial business, government, and the rest of the world. The categories are arranged into two groups of transactions: those that are, and those that are not recorded in the national accounts. Transactions by each sector are presented in two separate subsidiary accounts. The first combines the current and investment transactions accounts; the second includes financial transactions, other transactions and errors.

C. Some Features of the Estimates

When planning this survey of the financing of economic activity, the writer set in motion machinery for integrating existing financial information and relating it to other available information on current receipts and expenditures. The objective set was to carry this integration of existing information as far as possible within the time available. We have had neither time nor licence to develop much in the way of new sources of information. It should not be surprising that we have found gaps in our information, or that the systematic presentation of financial statistics emphasizes gaps that were known to exist. This spotlighting of the gaps we consider to be a contribution rather than an evidence of failure. We think we are under no illusions as to the preliminary and incomplete character of our estimates and we should like to stress these features again and again. We have taken pains to prepare a detailed statement of our sources and methods and the interested reader may consult this for a definitive indication of the quality of particular series or estimates. Perhaps we may review here rather briefly the weakest spots in our information.

Information on transactions involving goods not currently produced (apart from "inventories") and general receivables and payables is particularly meagre as we have mentioned. We have also had difficulty in estimating transactions by particular sectors in some categories. For example, we have not been able to show separately changes in holdings by the consumer sector of stocks, or of provincial bonds, or of municipal bonds. If we had independent estimates of debits and credits in any category, for all sectors, then unless our estimates were perfect or unless, by accident, our errors were offsetting, we should have a residual to report for that category. The fact that we have not reported category residuals is to be taken as indication that we have not been able to make independent estimates of the various debits and credits in each category. Indeed, in all or practically all of the categories, there appear residual estimates and consequently the category accounts have been balanced. The absence of residuals in statistical work of this kind is an indication not of the excellence of estimates but of the paucity of data. If in the future our statistical sources improve and we obtain a larger number of independent estimates, then we shall be able to report residual errors in the category accounts. We may look forward to the day when we can carry an additional account showing residual debits or credits for each category; let us hope the numbers will be small!

The sectors for which our information is least satisfactory are the "consumers" and "unincorporated business" sectors. The information on "non-financial corporations" is very little better. These are profoundly important sectors of the economy and it is a pity that our data for these sectors are so weak. A substantial part of our direct information on these sectors comes from statistics relating to taxation. While these are helpful they present some quite intractable problems into which we must not enter in this chapter. We very much need to develop new sources of information for these sectors. Undoubtedly direct surveys are required. It is likely that surveys of the Bureau of Statistics such as that of the finances of non-farm households conducted in 1956 will be helpful. The development of such new information is a task for future workers in this field; it is for us to stress that the data for consumers, unincorporated business and non-financial corporations are especially weak. Indeed, the estimates of debits or credits in some categories have been obtained residually for the three sectors combined and then split among the sectors on the basis of such fragmentary information as we could obtain. For details the reader is referred to Part VI below. We have had difficulties in making estimates for other sectors as well. Especial mention should be made here of municipal governments and municipal government enterprises, and some of the financial institutions (treated as sub-sectors within "other finance"). Data for provincial governments and provincial government enterprises leave much to be desired. This selection of sectors for special mention should not imply that no difficulties were encountered with respect to other sectors

or that the data we have for them are the best that can be hoped for. The sectors to which we have drawn attention are the ones for which we had the greatest difficulty in making estimates and for which we feel the estimates are weakest. We repeat our conclusion that the most serious gaps are in our knowledge of the transactions of non-financial corporations, consumers, unincorporated business, municipalities and municipal enterprises.

With one exception we show residuals for each sector; these residuals reflect errors and omissions throughout the accounts and not merely in categories of financial transactions or the transactions of a particular sector. The estimate of the credit item "claims on associated enterprises" in the unincorporated business sector is itself a residual estimate, so that no other residual for this sector is shown.

The National Transactions Accounts present figures on *flows* of currently produced goods and services, existing real assets and financial assets. For many purposes of analysis it is desirable to relate these flows to the amounts or stocks of real and financial assets outstanding. Estimates of the stock of industrial and social capital were undertaken for the Commission in connection with other aspects of its work and are reported elsewhere.[7] We should have liked to present balance sheets for the sectors and tables of the amounts outstanding of classes of financial assets together with distributions by sectors of the liabilities for and ownership of such assets. However, lack of time prevented us from preparing even such material of this kind as the data would allow.

Many will wish that our data on flows were reported in the National Transactions Accounts in much greater detail. In particular it would be desirable to show within each category of the financial accounts the amounts lent by each sector to every other sector and the amounts borrowed by each sector from every other sector. It is for the most part at present impossible to present data on net flows on this detailed to-whom-from-whom basis. However, in some isolated instances it is possible, and this material is presented either in the main tables or in supplementary tables. For example, in the case of non-transferable assets which are the liability of a single sector, such as loans made by chartered banks, the data emerge naturally in this to-whom-from-whom form. Within the non-financial transactions accounts, the data on labour service, proprietor service, taxes and transfers are or can be readily put in a to-whom-from-whom form, but data on capital service and "goods and services, n.e.i. (net)" cannot be so analyzed.[8]

While the National Transactions Accounts that have been prepared for this study contain estimates that are not as reliable or as detailed as

7 See especially Wm. C. Hood and Anthony Scott, *Output, Labour and Capital in the Canadian Economy*, Queen's Printer, Ottawa, 1957.

8 It may be remarked in passing that input-output accounts are very elaborate to-whom-from-whom accounts of the flows of currently-produced goods and services.

we should like and while they are not supplemented by data on outstanding stocks of goods and financial assets as fully as we should prefer, we nevertheless have found them most helpful in preparing this study of the financing of economic activity in Canada. They enable us to see which sectors of the economy have consistently been net suppliers of funds to other sectors and which have consistently been net demanders of funds from other sectors; they enable us to examine the instruments through which sectors have supplied funds to other sectors or acquired them from other sectors. They enable us to study how each sector has financed its acquisitions of goods and services, and they permit us to relate changes in the portfolios of financial institutions to economic developments generally. They enable us to study changes in the distribution of financial assets or liabilities within the context of changes in general levels and patterns of economic activity. But let us not extend this list; presumably the use actually made of the accounts in the following chapters will be a more helpful advertisement.

In concluding it may be remarked that our use of the accounts is largely a retrospective use. We shall use them in describing and analyzing events that have transpired. It may appeal to others that information arranged in this systematic way would be helpful in forming judgments as to prospective developments six months or a year or two hence. We regret that our series does not extend beyond 1954. With additional effort and organization, accounts could be produced with much less lag than this. To prepare quarterly accounts and to prepare them quickly would require major research and organizational effort, though we quite seriously believe such accounts for Canada to be practicable. Undoubtedly they would be of more assistance in assessing current economic developments than the annual accounts prepared with some lag to assist in this study in gaining the perspective of recent history on the working of the capital market.

4

THE FINANCING OF ECONOMIC ACTIVITY IN THE POST WAR PERIOD — AN OVER-ALL VIEW*

A. Introduction

In chapter 2 we described the capital market and the regulators of the flows of funds through it and we set forth the principles on which in this study we shall seek to appraise the performance of the capital market in the post-war period. In the last chapter we described the way in which we have organized a substantial part of the relevant statistical material for the purposes of this study. In this chapter we begin the substantive review of post-war experience.

We propose to devote this chapter to a review of the period as a whole as a background against which to develop in subsequent chapters a more detailed discussion of individual sectors of the economy, financial and non-financial. Our review will be of the aggregate indicators of economic activity and its financing. We shall concentrate on the objectives of maintaining high employment, promoting growth, promoting the acquisition of social capital, and controlling inflation. Official regulators will be considered in the light of these objectives. The movements of average or representative prices of goods and yields of securities will be taken as indicators of the success of the policy of controlling inflation. While we shall explain that the restrictions on the price system imposed during the war were progressively relaxed in the post-war years, our attention in this chapter will not be focused on the working of the price system as such. The working of the price system in the capital market will be a major theme in the remaining chapters. In the main we use the "macroscope" in this chapter, and make more use of the "microscope" in subsequent chapters.

Changes in economic affairs do not conveniently set in always on New Year's Day. However, many of our economic records are of developments over the calendar year. This has confronted us with a dilemma in organizing our exposition. We have divided the post-war years into four periods:

* Charts referred to in this chapter appear on pp. 124-126.

1946 through 1948, 1949 through 1951, 1952 through 1954 and 1955 through 1956, and have tried to date major changes in the tempo of economic activity within these periods by reference to data available more frequently than once a year. This is not entirely satisfactory but it seems the only possible type of compromise than can be made with data of the kind available to us.

B. The Sequence of Events

1. The legacy of the war

When Canada entered the post-war period she bore the legacy of her most costly war, a war which had necessitated the mobilization of her economy no less than her manpower. This legacy is to be found in disrupted patterns of production and trade, pent-up demands, the need to re-allocate men and resources, the effects of war on the financial assets and liabilities of various sectors of the economy, and the state of the regulators of economic activity.

From 1939 to 1945, federal government expenditures on goods and services increased from under one-twentieth to over one-quarter of gross national expenditure. Receipts from taxes were enormous by pre-war standards, a total of some $11,000 million having been collected during the 1939-45 period through direct taxes on income and indirect taxes. Nevertheless, over the war years the cumulative deficit of the government as reckoned in the national accounts amounted to some $8,400 million. This is the net demand that the government was forced to make on other sectors of the economy. Largely because of its increase in loans to agencies and foreign governments however, its gross demands were greater; in fact its direct and guaranteed debt was increased by approximately $13,150 million. If we compare the distribution of the government debt by holders at the end of 1938 with its distribution at the end of 1945 we see that the whole of the increase was absorbed within Canada. The details are shown in Table 4.1.

The consequence of this enormous volume of spending by the federal government and its demands on the public for financing was that at the end of the war Canadians had control of very large liquid balances with which they could seek to make effective their pent-up demands for goods, consumer goods, industrial capital and social capital. This pent-up demand, backed by large balances of liquid assets was one of the most important legacies of the war.

Matching the government's wartime demand for goods and services was, of course, a very drastic re-allocation of the economy's resources. At the end of the war, industry which had been directed to war production had now to be redirected to satisfying pent-up civilian demands. About a million and a half men and women who had been in the fighting services

Table 4.1

THE DISTRIBUTION OF THE INCREASE IN FEDERAL GOVERNMENT DEBT

(Direct and Guaranteed)

1939-45

(millions of dollars)

The Bank of Canada and chartered banks	4,400
Government of Canada accounts	660
Financial institutions	1,680
Consumers	5,160
Non-residents	−270
Other holders	1,520
Total increase	13,150

Figures have been rounded to show even tens of millions.

SOURCE: Bank of Canada, *Statistical Summary: Financial Supplement*, 1954, p. 58.

or in war production had to find their places in the peacetime economy. While it might be expected that the prospective demand for civilian goods would make the problem of reconversion easier, there was no general tendency to be sanguine over the country's economic prospects. The outlook for foreign trade was inevitably clouded by the disruption of normal trading patterns and by the impoverishment of European customers who had been important buyers of our produce in pre-war days.

At the end of the war we were left with a battery of government regulations many of which had been introduced to goad the economy to the war effort but which had in the last two years been modified to guide it into the period of reconstruction. In addition, new measures were introduced late in the war period in anticipation of conditions expected to emerge in the post-war period. Let us now review briefly the legacy of government regulations introduced during the war.

Canada began the post-war years with a legacy of very high taxes, but by the end of the war modifications in taxes on personal incomes and corporation incomes and in sales taxes had been introduced. Taxes on personal incomes were at their highest in 1943. In 1944 the total tax liability of a taxpayer was reduced by one-half of the refundable portion;[1] in 1945 the tax liability was reduced by the entire amount of the refundable portion and further by 4 percent of the remaining liability. An indication of the levels of taxation at their peak and in 1945 is given in Table 4.2.

1 A part of the personal income tax liability was termed the savings portion. For single persons it amounted to the least of half of the total tax liability or 8 percent of taxable income plus 1 percent for each dependent or $800 plus $100 for each dependent; while for married persons it amounted to the least of half of the total tax, or 10 percent of gross taxable income plus 1 percent for each dependent or $1,000 plus $100 for each dependent. Taxpayers were allowed to reduce the savings portion of the tax by certain types of voluntary savings. The savings portion of the tax, less voluntary savings was termed a refundable tax to be returned not later than two years after the end of the war with interest at 2 percent per annum.

Table 4.2

PERSONAL INCOME TAXES AS A PERCENTAGE OF INCOME

	Income			
	$1,500	$3,000	$5,000	$10,000
Single, no dependents				
1943	24.5	35.5	42.6	51.1
1945	15.8	25.4	33.3	41.4
Married, two children				
1943	3.3	22.3	33.2	45.5
1945	1.5	10.6	20.4	32.2

The highest rates of taxes on corporation incomes, imposed in the middle of 1942 were still in effect at the end of 1945. The combined effect of the tax on profits and the excess profits tax in this period was to impose a 40 percent tax on all profits and a 60 percent tax on profits in excess of 116.67 percent of average profits earned during the base period 1936-39 inclusive. However, one-third of the 60 percent tax was refundable after the war. Although the rates of corporation taxes were not changed until the first of January 1946, there were changes in the tax regulations that were of very considerable importance. The chief of these was the provision made in November, 1944 for special depreciation allowances on new plant and equipment acquired during the period November 10, 1944 and March 31, 1949. Under these allowances, the business taxpayer was permitted to charge depreciation at a rate within a range varying between double and one-half of ordinary rates, up to 80 percent of the cost of the new fixed assets, and was required to charge ordinary rates on the balance of the cost. The effect was to permit those firms acquiring new capital goods to reduce the period within which new fixed assets could be written off for tax purposes, by 40 percent.[2] In January, 1948 the following summary was published in an official report:

> "Special depreciation has been approved for investment expenditures of $1.4 billion which reporting companies expect to spend between November 10, 1944, and March 31, 1949. This outlay involves 8,054 different projects planned by 4,212 companies. It entails the conversion, modernization and expansion of 3,668 existing plants and the establishment of 1,174 new plants. Broadly about two-fifths of all business investment and some four-fifths of total manufacturing investment undertaken in the transition period has been or is making use of special depreciation provisions."[3]

2 For example, if the ordinary depreciation rate were 5 percent then, under the straight-line methods then in use an asset would be wholly depreciated for tax purposes in 20 years if no advantage were taken of the provisions for accelerated depreciation. But if advantage were taken the asset could be written off in 12 years, (8 years at 10 percent and 4 years at 5 percent).

3 Department of Reconstruction and Supply, *Encouragement to Industrial Expansion in Canada, Operation of Special Depreciation Provisions, November 10, 1944 - March 31, 1949,* Ottawa, 1948, p. 9.

We may note in passing that sales taxes, which also had been raised during the war, were reduced or removed on some commodities during 1945.

Control of prices under the Wartime Prices and Trade Board was also still in effect in Canada at the end of 1945.[4] In support of price controls there was a network of controls over supplies and uses of materials and distribution of goods. Some of these controls were adminstered by the Department of Munitions and Supply (later Reconstruction and Supply). The programme of decontrol was begun as early as 1944 when restrictions on the commencement of business enterprises were relaxed. In 1944 and 1945 restrictions on the kinds of goods that might be manufactured were relaxed very substantially. During 1945 the Prices Board showed greater flexibility in dealing with applications for price adjustments. However, the first major moves in dismantling the system of price controls, rationing, subsidies, production controls and regulations affecting exports and imports were not made until 1946.

We must also recall that during the war a system of control over foreign exchange was established and remained very largely in effect at the beginning of 1946.[5] Some beginnings in the relaxation of control had been made as early as May 1944 when restrictions on the availability of United States dollars to Canadian travellers were relaxed. Later United States dollars were made more freely available for the extension of Canadian business abroad, and substantial elimination of controls of imports especially from the United States was effected. However, at the end of 1945 the main corpus of controls remained in effect, and the exchange rate *vis-a-vis* the United States dollar was pegged at 110.25 Canadian cents for one United States dollar.[6] During the war our official holdings of gold and United States dollars rose substantially from $393 million at mid-September, 1939 to just over $1,500 million at the end of 1945. However, owing to the offsetting effects of the liquidation by Canadians of holdings of United States securities, borrowing by Canadians in the United States and the accumulation of undistributed profits of United States companies in Canada, there was very little change over the war period in our balance of indebtedness to the United States.

In concluding this review of the legacy of wartime regulations and measures we must mention several measures introduced in that most fruitful session of the Canadian Parliament in 1944. Most of these measures will be discussed in more detail in later chapters. Among the acts passed

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4 On the wartime control of prices in Canada, the reader is invited to consult the annual reports of the Wartime Prices and Trade Board and K. W. Taylor, "Canadian Wartime Price Controls", *Canadian Journal of Economics and Political Science,* Vol. 13, 1947, pp. 81-98.

5 The reader may wish to consult the report of the *Foreign Exchange Control Board* of March 1946, and the article by Alan O. Gibbons entitled "Foreign Exchange Control in Canada, 1939 - 51", which appeared in the *Canadian Journal of Economics and Political Science,* Vol. 19, 1953, pp. 35-54.

6 This is the average of the official buying and selling rates which were 110 and 110.50 Canadian cents, respectively.

in 1944 were the National Housing Act, the Industrial Development Bank Act, the Farm Improvement Loans Act and the Export Credits Insurance Act. These, together with the Family Allowances Act, the Agricultural and Fisheries Price Support Acts, the Unemployment Insurance Act (passed in 1940) and others, comprised the legislative programme with which the Canadian government prepared to meet the problems of the post-war period. A comprehensive statement of government policy was presented to Parliament in 1945 in the White Paper entitled *Employment and Income with Special Reference to the Initial Period of Reconstruction.* In it the government declared that "the central task of reconstruction . . . must be to accomplish a smooth, orderly transition from the economic conditions of war to those of peace and to maintain a high and stable level of employment and income". It recognized the dangers of immediate post-war inflation, and the contribution to its control that could be made by rapid absorption of war workers in civilian production.

The price system remained in substantial eclipse during the war. We have referred to exchange controls and price controls. We may record here, for reference, the drift of prices and interest rates during the war period. Wholesale prices rose some 32 percent from September 1939 to December 1945; consumer prices (as measured by the then official cost of living index) rose some 19 percent in the same period. Yields on government bonds on the whole drifted downwards, though in the years 1941 to 1943 there was some increase in yields on government securities of shorter maturities. (For further detail see Table 4.3.) It was in February 1944 that the Bank of Canada lowered its discount rate from 2½ percent to 1½ percent, the first change it had ever made in this rate. The Governor's explanation is worth quoting:

> " . . . It . . . seems appropriate that the Bank should, by reducing its Rate, signify its intentions to continue the kind of monetary policy which has brought about the current level of interest rates. A policy aimed at higher interest rates would only become intelligible if, after war shortages are over, consumers' expenditure and capital development were to proceed at a rate which would over strain our productive capacity. I see no prospect of such a situation arising in a form which could call for a policy of raising interest rates."[7]

Canadians thus entered the post-war period with a domestic price level that had risen less than that of most other countries during the war, and with the very low interest rates that characterized most western countries and which the monetary authorities contended should remain low.

An appetite for goods whetted by privation and encouraged by high liquidity, structural distortions in patterns of production and trade, a battery of economic controls, relatively low prices and exceedingly low

7 Bank of Canada, *Annual Report*, 1944, p. 5.

interest rates and an official view reflecting apprehension that a burst of inflation might be followed by continuing unemployment — this was the economic legacy of the war.

Table 4.3

PRICES AND INTEREST RATES IN CANADA

September 1939-December 1945

	Wholesale prices	Cost of living	Theoretical Government of Canada bond yields as of 15th of the month		
			15 year bond	5 year bond	2 year bond
September 1939	78.4	100.8	3.51	2.67	2.05
December 1939	81.7	103.8	3.50	2.40	1.72
June 1940	81.7	104.9	3.34	2.27	1.59
December 1940	84.2	108.0	3.11	2.12	1.34
June 1941	90.1	110.5	3.13	2.13	1.40
December 1941	93.5	115.8	3.06	2.17	1.46
June 1942	95.8	116.7	3.05	2.15	1.49
December 1942	97.0	118.8	3.06	2.22	1.48
June 1943	99.6	118.5	3.00	2.22	1.50
December 1943	102.5	119.3	3.00	2.24	1.55
June 1944	102.5	119.0	2.99	2.14	1.45
December 1944	102.5	118.5	2.99	2.08	1.44
June 1945	104.0	119.6	2.95	1.92	1.38
December 1945	103.9	120.1	2.83	1.77	1.38
Base years	1926 = 100	1935-9 = 100			
Sources:	D.B.S.	D.B.S.	Bank of Canada		

2. *1946-48: Growth with rising prices*

In 1946 to 1948 many of the economic adjustments entailed by the ending of the war were effected more quickly and smoothly than had been thought possible. In spite of the fears of unemployment with which many in the government and in the country had anticipated the transition period, or especially the latter part of it, very little unemployment emerged. The great problem for policy makers was that of containing inflation. Progress was made in relaxing many of the wartime economic controls but an unwillingness to allow freer movement of prices in the bond markets and exchange markets added to the need for fiscal controls and many direct controls over supplies and demands. Such pressures as were not restrained by these measures had their vent in rising prices of goods and of labour services. Wholesale prices rose just over 50 percent; the urban consumer price index rose just over 30 percent.

Economic activity as measured by real output supplied and consumed ran at high levels which rose as the period advanced. The outstanding

features in the financing of this activity were the sale of Government of Canada securities by the public and the financing through loans extended by the Canadian government of purchases by war-ravaged foreign governments, especially the United Kingdom. But the enormous conversion of public holdings of federal government securities into cash was scarcely reflected in the prices of these securities — the monetary authorities allowed some downward movement in 1948 — and the pressures in the exchange market fed by the official loans to foreign governments, though they reached crisis proportions in 1947, had no reflection in the exchange rate, which after a substantial adjustment in mid-1946 was kept pegged at par with the United States dollar.

a. Economic activity and its financing — a review of the aggregates

In the first three post-war years real gross national expenditure (GNE) increased moderately; after declining slightly from 1945 to 1946 it climbed 3.2 percent in the next two years. Among the categories of GNE, gross private domestic investment showed the most dramatic increase in constant (1949) dollars; excluding inventories, this category rose by 94 percent from 1945 to 1948. Consumer expenditures rose by 13 percent in this period. Government expenditures on goods and services declined by 58 percent, and exports and imports declined by 17 percent and 6 percent respectively. Within the category of fixed private investment expenditures, non-residential construction led, rising by 142 percent; expenditures on machinery and equipment were in second place with a rise of 106 percent while residential construction was third, showing an increase of 35 percent.

The changes were not spread evenly over the period. The details are shown in Table 4.4. By and large the changes were most pronounced in 1946. It may be noted that government expenditure started to grow again by 1948, as did exports, but imports which increased substantially in 1947 declined sharply in 1948 under the impact of the exchange conservation measures referred to below.

The changes we have referred to exclude the effects of price movements; they are changes in real expenditures or in the volume of expenditures— to use the technical jargon. From the standpoint of the financing of economic activity perhaps the more relevant magnitudes are the changes in expenditures as measured in terms of the prices paid by spenders. These changes in current dollar magnitudes show even more pronounced increases in investment expenditures. Excluding inventories, investment expenditures in current dollars increased by 154 percent and in particular, non-residential construction increased by 223 percent. Consumer expenditures in these terms rose by nearly 45 percent and exports and imports both rose, exports by some 13 percent and imports by twice that amount. The details are shown in Table 4.4.

Table 4.4

PERCENTAGE CHANGES IN GROSS NATIONAL EXPENDITURE AND ITS MAIN COMPONENTS 1946 TO 1948

Categories of Expenditure	1946 over 1945		1947 over 1946		1948 over 1947		1948 over 1945	
	Constant dollars	Current dollars	Constant dollars	Current dollars	Constant dollars	Current dollars	Constant dollars	Current dollars
Gross national expenditure	— 2	1	1	12	2	15	1	28
Personal expenditure on consumer goods and services	11	15	3	13	— 2	11	13	45
Government expenditure on goods and services	—49	—51	—19	—14	3	17	—58	—51
Business gross fixed capital formation	30	35	35	50	10	26	94	154
New residential construction	8	16	19	34	5	23	35	92
New non-residential construction	62	72	23	37	21	37	142	223
New machinery and equipment	25	27	53	70	7	21	106	160
Exports	—18	—11	1	13	1	11	—17	13
Imports	— 7	— 1	12	26	—10	—	— 6	25

The details of the financing of current and capital expenditures, to the extent that we know them, are arrayed in the accounts given in Part VI below. Though there is much information still lacking, these accounts nevertheless are sufficiently detailed as to be quite complex. To assist in focusing attention on the broad patterns, we have prepared abbreviated accounts for presentation and discussion in this chapter. They appear in Tables 4.5, 4.6 and 4.7 for the years 1946-48. We shall refer extensively to these abbreviated tables in the few paragraphs which follow on the financing of economic activity in the immediate post-war years.

Perhaps the first broad pattern among the aggregates to be recognized is the classification of sectors according to whether their *net* balances of saving over investment are positive or negative. The balance of saving over investment for any sector, if positive, shows the amount of that sector's current income that has been used for purchasing existing real assets or (broadly speaking) financial assets from other sectors. If the balance of saving over investment is negative for any sector then this balance shows the net extent to which that sector has had to sell existing real assets or financial assets to other sectors in order to supplement its current income in financing acquisitions of currently-produced goods and services. It is hardly necessary to remind the reader that the net balance for a sector depends *inter alia* on the definition of a sector; as we have stressed in the last chapter, this is particularly important to remember in interpreting the balance of saving over investment for the consumer sector.

According to the definitions and conventions we have adopted, the consumer sector is the only one which in each of the years 1946-48 was a net supplier of the funds arising from current income to other sectors of the economy. The non-financial business sector, and the rest of the world, consistently throughout the immediate post-war years found their current incomes inadequate to finance expenditures on currently-produced goods and services. The government sector had a net negative balance of saving over investment in 1946 but a net positive balance in each of the other two years. The balances in the financial sector are small and, for our purposes, unimportant; this sector is, of course, essentially an intermediary sector, serving to transmit funds from one sector to another.

The details of the balances of saving over investment are shown in Table 4.8. Here it will be seen that within the non-financial business sector, unincorporated business and non-financial corporations had negative balances in each of the three years. The balances of unincorporated business grew more negative as the period progressed; the balances of non-financial corporations, although totalling almost the same over the three years of the period, followed quite a different pattern, reaching a peak (in absolute size) in 1947. Government enterprises showed a small positive balance in 1946, but in 1947 and 1948 became increasingly dependent upon other

Table 4.5

ABBREVIATED NATIONAL TRANSACTIONS ACCOUNTS

1946

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
I Transactions Recorded in the National Accounts												
Services of factors of production	168	8,750	7,721	—	—	—	1,507	404	70	312	9,466	9,466
Transfers	945	1,118	1,965	—	—	—	1,366	3,158	—	—	4,276	4,276
Goods and services, n.e.i. (net)	7,863	—	—	—	—	11,002	582	—	3,140	2,565	11,585	13,567
Saving	892	—	1,316	—	—	—	107	—	—333	—	1,982	—
Investment	—	—	1,721	—	—	—	261	—	—	—	1,982	—
Saving — Investment	892	—	—405	—	—	—	—154	—	—333	—	0	—
Total (ex. Saving)	9,868	9,868	11,002	—	—	11,002	3,562	3,562	2,877	2,877	27,309	27,309
II Transactions Not Recorded in the National Accounts												
Saving — Investment (carried)	—	892	—	—426	—	21	—	—154	—	—333		0
Currency and deposits: Domestic	825	—	124	—	91	508	—608	2	78	—	510	510
Other (incl. gold and foreign deposits)	—	—	16	—	28	—140	—250	—	—156	—222	—362	—362
Instalment credit and charge accounts	—	55	40	14	29	—	—	—	—	—	69	69
Loans: Bank	—	7	—	92	103	15	—	—11	—	—	103	103
Other	—	41	—	—	21	—1	643	—2	—	626	664	664
Mortgages	67	—	—4	168	85	—	20	—	—	—	168	168
Bonds and Stocks: G. of C. bonds	—255	—	—185	—39	290	—	79	—49	—17	—	88	—88
Other bonds and stocks	53	—	—110	80	—14	13	39	—14	—111	—222	—143	—143
Insurance and pensions	255	—	—	—	—	201	—	54	—	—	255	255
Claims on associated enterprises	118	—	314	354	15	34	—72	—	40	27	415	415
Other transactions and errors	41	107	2	—46	37	35	58	84	65	23	203	203
Total	1,103	1,103	197	197	686	686	—92	—92	—101	—101	1,794	1,794

Table 4.6

ABBREVIATED NATIONAL TRANSACTIONS ACCOUNTS

1947

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
I Transactions Recorded in the National Accounts												
Services of factors of production....	191	9,700	8,852	—	—	—	1,305	375	64	337	10,412	10,412
Transfers....................	972	856	2,362	—	—	—	1,139	3,617	—	—	4,473	4,473
Goods and services, n.e.i. (net).....	8,899	—	—	—	—	12,474	454	—	3,576	3,284	12,929	15,758
Saving........................	494	—	1,260	—	—	—	1,094	—	—19	—	2,829	—
Investment....................	0	—	2,488	—	—	—	341	—	0	—	2,829	—
Saving — Investment............	494	—	—1,228	—	—	—	753	—	—19	—	0	—
Total (ex. Saving).............	10,556	10,556	12,474	—	—	12,474	3,992	3,992	3,621	3,621	30,643	30,643
II Transactions Not Recorded in the National Accounts												
Saving — Investment (carried).....	—	494	—	—1,258	—	30	—	753	—	—19	—	0
Currency and deposits: Domestic...	274	—	13	—	13	209	—94	1	4	—	210	210
Other (incl. gold and foreign deposits)...................	—	—	9	—	—246	4	19	—	1	—221	—217	—217
Instalment credit and charge accounts	—	138	114	40	64	—	—	—	—	—	178	178
Loans: Bank..................	—	21	—	384	476	31	—	40	—	—	476	476
Other..................	—	31	—	—19	23	—	527	—21	—	559	550	550
Mortgages....................	92	—	—1	274	154	—	29	—	—	—	274	274
Bonds and Stocks: G. of C. bonds..	—62	—	—107	51	—657	—	273	—651	—47	—	—600	—600
Other bonds and stocks.........	117	—	—50	238	—33	49	—3	30	—234	—520	—203	—203
Insurance and pensions..........	314	—	—	—	—	239	—	75	—	—	314	314
Claims on associated enterprises....	144	—	455	653	63	—712	—732	6	61	44	—9	—9
Other transactions and errors......	61	256	269	340	17	24	51	—163	69	10	467	467
Total........................	940	940	701	701	—126	—126	70	70	—146	—146	1,440	1,440

Table 4.7

ABBREVIATED NATIONAL TRANSACTIONS ACCOUNTS

1948

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
I Transactions Recorded in the National Accounts												
Services of factors of production	230	11,241	10,243	—	—	—	1,409	386	70	325	11,952	11,952
Transfers	1,046	884	2,515	—	—	—	1,150	3,827	—	—	4,711	4,711
Goods and services, n.e.i. (net)	9,855	—	—	—	—	14,205	492	—	3,980	3,308	14,327	17,513
Saving	994	—	1,447	—	—	—	1,162	—	—417	—	3,186	—
Investment	—	—	2,732	—	—	—	454	—	—	—	3,186	—
Saving — Investment	994	—	—1,285	—	—	—	708	—	—417	—	0	—
Total (ex. Saving)	12,125	12,125	14,205	—	—	14,205	4,213	4,213	3,633	3,633	34,176	34,176
II Transactions Not Recorded in the National Accounts												
Saving — Investment (carried)	—	994	—	—1,263	—	—22	—	708	—	—417	—	0
Currency and deposits: Domestic	611	—	135	—	12	813	85	4	—26	—	817	817
Other (incl. gold and foreign deposits)	—	—	—2	—	91	—9	—24	—	—2	72	64	64
Instalment credit and charge accounts	—	80	58	2	24	—	—	—	—	—	82	82
Loans: Bank	—	31	—	117	193	—1	—	40	—	6	193	193
Other	—	27	—	—1	28	2	42	—20	—	62	70	70
Mortgages	151	—	—1	354	183	—	21	—	—	—	354	354
Bonds and Stocks: G. of C. bonds	—529	—	—170	—46	277	—	96	—180	100	—	—226	—226
Other bonds and stocks	136	—	—23	342	843	26	73	171	—62	428	967	967
Insurance and pensions	306	—	—	1	—	220	—	85	—	—	306	306
Claims on associated enterprises	208	—	152	589	—31	579	726	—2	71	—40	1,126	1,126
Other transactions and errors	55	—195	304	359	27	38	43	256	84	55	513	513
Total	938	938	454	454	1,646	1,646	1,062	1,062	166	166	4,266	4,266

sectors. In the government sector, the federal government after showing a large deficit in 1946 developed very large surpluses in 1947 and 1948. Provincial governments showed a substantial surplus in the first two years but a much smaller one in 1948. Municipal governments had a progressively larger deficit in each year.

Thus in summary, in the early post-war years business, foreigners and municipal governments consistently showed deficits, consumers and provincial governments consistently showed surpluses. The federal government shifted from a deficit to a surplus position after 1946.

Let us now review the disposition of these surpluses or deficits. We must bear in mind that no surplus sector failed to attract funds from other sectors while acting as a net supplier of other sectors and that no deficit sector failed to supply funds to other sectors. Consider first the consumer sector.

As we have remarked, the consumer sector was a surplus sector throughout the period. Enjoying rising annual income, its saving or surplus was about $900 million in 1946, and $1 billion in 1948. The national accounts records show its surplus in 1947 at about $500 million, a much smaller amount. The domestic deposits of consumers in banks and other institutions were built up very substantially in the early post-war years though considerably more in 1946 and 1948 than in 1947, apparently. The net increase over the three years was about $1.7 billion. Substantial amounts of the order of $875 million were also saved through contributions to life insurance and pension programmes. There was a steadily increasing investment by consumers in stocks and non-federal government bonds and in unincorporated business (in which category, it will be remembered, is included the business of home owning). This investment amounted to $780 million over the three-year period. Consumers were important suppliers of mortgage money and supplied it on an increasing scale throughout the period. According to our records consumers supplied about 39 percent of the $800 million over-all net increase in the supply of mortgage funds in the years 1946 to 1948. But consumers also made claims on other sectors. In the first three post-war years they reduced their holdings of Government of Canada bonds by a net amount of some $850 million, and they increased their liabilities through instalment credit, charge accounts and loans by $430 million.

Turning to non-financial business, a deficit sector, we find that very large demands on other sectors were exercised through the building up of other sectors' equity in such business. Over the three-year period the total of demands made through the net build-up of liabilities in this category was of the order of $675 million. Of this, far and away the largest amount ($470 million) is represented by the increase in the equity of consumers in unincorporated business. Another $150 million is repre-

Table 4.8

BALANCES OF SAVING OVER INVESTMENT, 1946-48

(millions of dollars)

Sectors	1946	1947	1948
I Consumers	892	494	994
II Unincorporated business	—282	—457	—548
III Non-financial corporations	—203	—721	—359
IV Government enterprises	59	—80	—356
II-IV Non-financial business	—426	—1,258	—1,263
V Banking	24	20	15
VI Life insurance	1	0	1
VII Other finance	—4	10	—38
V-VII Financial business	21	30	—22
VIII Federal government	—248	684	760
IX Provincial governments	97	107	32
X Municipal governments	—3	—38	—84
VIII-X Government	—154	753	708
XI The rest of the world	—333	—19	—417

sented by the growth in the equity of governments in government enterprises. (This figure reached its largest proportions in 1948; indeed in 1946 there was a considerable reduction in the equity of governments in these enterprises.) Though corporations invest in each other to a substantial degree, the *net* increase in demands of non-financial corporations on other sectors through the category "claims on associated enterprise" was some $130 million over the period. These demands were met almost entirely by the direct investment of foreigners in Canadian enterprises. In addition to the $675 million just discussed, non-financial business raised some $660 million through the sale of stocks and non-federal bonds. The sale of federal bonds brought another $460 million. Bank loans, which were particularly heavy in 1947 brought in another $600 million over the period. Mortgages were an instrument through which non-financial business exercised demands on other sectors to an increasing degree. Some $800 million were secured in this way with unincorporated business obtaining about four-fifths of it. Non-financial business also supplied funds to others through an increase in bank deposits of some $300 million and a net increase in instalment credits and charge account credits of another $160 million. Though changes in receivables and payables were undoubtedly important, our figures should not be used to support very definite statements.

Within the government group of sectors the federal government's operations were of overriding importance during the post-war years, so that we perhaps may concentrate our attention here on its transactions. The main features were as follows. In 1946 the federal government made net demands on other sectors. A reduction in its domestic and foreign

deposits of some $900 million, a reduction in its equity in government enterprises of $90 million and funds from other miscellaneous sources were not wholly offset by contributions to other sectors through government loans of $650 million (largely to foreign governments), the buying for its own portfolio or for retirement of its own or its guaranteed obligations to the extent of $150 million and through other channels. In 1947 it was a substantial contributor to other sectors, the net contribution amounting to $685 million. Its loans, again largely to foreign governments, amounted to $560 million and its buying in and retirements of bonds totalled $890 million. The loss of official holdings of gold and United States dollars associated with the exchange crisis of 1947 shows up in our federal government accounts as a decrease in the claims of the federal government on the Exchange Fund in the financial sector.[8] In 1948 the federal government was again a substantial contributor of funds to other sectors, the net total being over $760 million. Its loans were of very much smaller magnitude amounting only to some $65 million net, and its purchases and retirements of bonds were also a smaller quantity, $290 million. However, the build-up of exchange reserves following the adoption of conservation measures in late 1947 resulted in an increase in the government's claims on the Exchange Fund in the financial sector of some $520 million.

The rest of the world made net demands on domestic sectors of the economy in each of the first three post-war years. The outstanding feature of the balance of payments in these years was the large flow of funds from Canada through the inter-governmental loans mentioned above in the discussion of federal government transactions. Non-residents also disposed of Canadian securities in each of the three years, the largest disposal occurring in 1947 when the amount was some $280 million including nearly $50 million worth of Government of Canada bonds. In 1948 the federal government floated a $100 million issue in the United States. There are some other large items in the balance of payments as presented here: some of these, such as part of currency and deposits and most of transactions in foreign securities are, however, reflections of the operations of the Exchange Fund and the Bank of Canada, connected with the large movements in exchange reserves that have been referred to earlier.

The outstanding developments in the transactions of the financial sector in the immediate post-war years were the increases in domestic deposits of over $1.5 billion, the increases in bank loans of $772 million, $476 million of which took place in 1947, and the large purchases of Government of Canada bonds in 1946 and 1948 more than offset by the sales of such securities in the amount of nearly $660

8 The decrease in the claims of the federal government on the Exchange Fund may be regarded as a source of funds for the federal government and a use of funds by the Exchange Fund. Offsetting this use of funds by the Exchange Fund are sources from other sectors represented principally by decreases in its assets of gold and securities of foreign governments.

million in 1947. A few paragraphs below, we shall review monetary policy in the early post-war period, and in subsequent chapters we shall discuss various financial institutions in some detail. It will therefore suffice here to point out the larger changes in the balance sheets of the chartered banks and the life insurance companies.

The Canadian dollar deposits of the chartered banks increased by nearly $300 million in 1946, by less than half of this amount in 1947 and by twice it in 1948. This use of funds by other sectors of the economy was offset by transactions in securities and loans. In 1946 bank loans increased by just over $100 million with the non-financial business concerns claiming nearly 90 percent of this net increase. Bank holdings of Canadian securities also showed a net increase of some $170 million; securities of Canadian corporations comprised about one-half of the increase.[9] In 1947 there was an enormous increase in bank loans amounting to $475 million, of this increase $380 million were loans to the non-financial business sector. A tremendous reduction in holdings of Government of Canada securities of $650 million occurred, while the banks purchased provincial government bonds and corporation bonds in amounts respectively slightly over and slightly under $150 million. In 1948 the increase in bank loans of $193 million, while still large was much smaller than the increase of the previous year. The reduction in Government of Canada bond holdings of 1947 was not continued into 1948 as in this latter year bank holdings of these prime securities increased by $310 million. There was a reduction in bank holdings of provincial government bonds in 1948 and a reduction in the rate of increase of holdings of corporate bonds in line with Bank of Canada suggestions that term loans to business be restricted. In summary, the chartered banks' assets increased by $1.1 billion in the first three post-war years; holdings of Government of Canada bonds decreased by $300 million, loans increased by $770 million, and holdings of corporate bonds and bonds of junior Canadian governments increased by $348 million and $173 million respectively.

Consumer saving through life insurance companies increased by an average of $210 million in the first three post-war years, being slightly below this average in 1946 and slightly above in 1947. The life companies continued to increase their holdings of government bonds in 1946 by some $140 million but in the next two years (and especially in 1948) reduced their holdings by $190 million. Over the period they increased their investment in Canadian corporate bonds and foreign bonds by $365 million. They showed a net increase of only some $30 million in holdings of the bonds of junior Canadian governments and their holdings of stocks of all kinds increased only by $18 million.

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9 Figures for corporation securities in this sentence are derived from the figures of chartered bank assets as published in Bank of Canada, *Statistical Summary: Financial Supplement, 1956.*

We have given a summary of the financing of economic activity in the first three post-war years, but the summary is long and the story is complicated. Let us try, at the risk of some distortion, to epitomize the record of events reviewed in the last few pages. The post-war period began with a very much enlarged federal government debt, held very largely within the country and in substantial part by persons and business anxious to give expression to their long-suppressed demands for goods, especially durable and capital goods. In the early post-war years expression was given to these demands; consumer expenditures rose by 50 percent with expenditures on durables and business capital expenditures rising each by approximately 170 percent. The federal government and the Bank of Canada together absorbed $1.5 billion of the government's direct and guaranteed obligations, while consumers and non-financial businesses, apart from government enterprises, reduced their holdings by $1.3 billion. Consumers were net suppliers of funds, directly and indirectly, through financial institutions, to other sectors, especially business. The financial institutions, themselves net sellers of federal bonds in the period as a whole, greatly increased their financial accommodation of business through the increase of bank loans and the purchase of bonds and stocks. In the very briefest terms the early post-war years brought an enormous shift in expenditures and in finance: the federal government's demand for goods and for finance which had dominated the economic scene in wartime, was replaced by the demand for goods and finance by the rest of the domestic economy. To this however, was added the demand for goods and finance by the rest of the world, and even in this sphere, the role of the federal government in supplying finance (through inter-governmental loans) was predominant. Let us turn now to consider the regulators of the flows of funds in this period in which the roles of the federal government and the rest of the economy were reversed.

b. The regulators of the flows of funds

We turn first to monetary and debt management policy. Naturally the enormous volumes of transactions in the government bond market created thorny problems for the monetary authorities. The first Governor of the Bank of Canada, in reviewing post-war monetary policy has written, with respect to the first three years, as follows:

> "... One possible course of action would have been to adopt the rigorous policy of preventing any increase in the volume of bank deposits held by the public during the early post-war years..... the rigorous policy would have required large sales of Government securities by the chartered banks if the need for loans was to be met. The rigorous policy would also have involved the Bank of Canada in selling Government securities so as to reduce chartered bank cash reserves to the point where the chartered banks would have felt unable to increase their loans without liquidating security holdings...

In fact, a rigorous monetary policy of the type described was not adopted. It was felt that the degree of possible benefit to our price and cost structure would not be commensurate with the damage done in hampering reconversion and holding back capital development."[10]

It was argued in some detail that chaotic conditions in the bond market would combine with the reductions in lending and liquidity to discourage essential capital investment but that in any event "this rigorous policy would not have insulated Canada from the effects of the upward sweep in world prices. .... The most which it could have done would have been to prevent a relatively small part of the rise in our price level which actually took place from 1946 to 1948".[11]

In fact the Bank of Canada joined with the Department of Finance to give massive support to the government bond market in the first two post-war years and especially in 1947. It is not necessary to spell out the nature of this support[12] in detail here; we have already observed it in broad outline, in the review of financial transactions by sectors. The government, aided by a drawing down of deposits in 1946 and by a surplus and a very substantial flow of funds resulting from the sale of foreign exchange reserves in 1947, was a very heavy buyer of its own securities. There was a substantial retirement of this debt and a large expansion of the holdings of federal securities in special government accounts. The Bank of Canada for its part did not keep the commercial banks short of cash. The banks were net buyers of Government of Canada securities in 1946 and in 1948. In 1947 the banks suffered no decline in the average level of their cash reserves; they reduced their average cash reserve ratio and they sold Government of Canada securities in considerable volume, but this latter was one side of a switch into the more attractive loans and non-federal securities. Neither the reduction in the cash ratio nor the sale of government bonds could be interpreted as evidence of pressure from the monetary authorities. From the end of 1947, however, there was an evidence of a modification of monetary policy. In late 1947 the Bank of Canada became concerned over the size of bank loans against inventories and urged the banks to keep a careful watch on these loans. In February 1948, after considering the reported investment intentions, the Bank "suggested to the chartered banks that conditions prevailing at that time made it undesirable for capital expenditures to be financed through expansion of bank credit".[13] Moreover, the recovery of exchange reserves in December 1947 presaged their forthcoming considerable enlargement in response to exchange conservation policies initiated in November. This

10 *Post-War Monetary Policy*. Statement by Mr. G. F. Towers, Governor of the Bank of Canada, at a hearing of the Standing Committee on Banking and Commerce of the House of Commons, March 18, 1954. Minutes of Proceedings and Evidence, No. 16, pp. 694-95.

11 *Post-War Monetary Policy*, statement by Mr. Towers, *op. cit.*, p. 695.

12 The reader may consult E. P. Neufeld, *Bank of Canada Operations, 1935-54*, Toronto, 1955, Chapter VI.

13 Bank of Canada, *Annual Report to the Minister of Finance*, 1948, p. 7.

meant that although the government was running a surplus and could plan to continue to do so, there was strong likelihood that the surplus would be needed to acquire gold and United States dollars and would not be available to support the government bond market. On the other hand, the Bank of Canada was rapidly approaching the statutory limit on its holdings of securities having more than two years to maturity, so that without a change in the Bank of Canada Act it could not be counted upon to purchase very large blocks of securities in the longer maturity range. These considerations combined with the fact that investment intentions, as expressed in the semi-annual canvass of business and government, were running very high and with the fact that yields on United States government securities had been rising since mid-1947 must have motivated the decision in January 1948 to allow bond prices to fall.[14] Early in January, the Bank ceased its practice of publishing daily a list of bids and offers for Government of Canada securities. Following this action the yield on the 15-year theoretical bond increased from 2.56 percent to 2.79 percent at the middle of January. The market was again stabilized at this point until late February when yields were allowed to rise another notch to carry the 15-year bond rate to 2.98. The market was kept fairly stable from then until near the end of the year when rates started to come down. It may be noted that there was no immediate change in very short-term rates such as the rate on treasury bills and when it did advance later in 1948 the change was exceedingly small. In a public statement in late February on the rise in yields the Bank said: "The Bank is not in favor of a drastic increase in interest rates which would be likely to create a situation that might hamper and might even prevent essential forms of capital investment which Canada needs".[15]

In summary, we may say of monetary and debt management policy that the Bank of Canada took the view that a rise in interest rates would seriously curtail essential capital investment and would be ineffective in mitigating substantially the impact of foreign prices on our domestic price level. In the bank's extreme policy there was no concession to the view that rises in the rate of interest might be effective in a period of very heavy pressure on resources in distinguishing "essential" investment from projects which might well be postponed. Rather, the implication was that this task was better left wholly to prices in the market for goods and services and to administrators of special depreciation allowances, and to controllers of scarce materials and scarce exchange.[16] The policy of a fixed exchange rate of course severely limited the extent to which an interest rate policy

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14 At this time Victory Bonds, due in 1966 for example, were selling above par.

15 Bank of Canada, *Annual Report to the Minister of Finance*, 1948, p. 11.

16 The Bank's view has been criticized. See for example E. P. Neufeld, *Bank of Canada Operations, 1935-54*, *op. cit.*, Chapter VI; M. F. Timlin, "Monetary Stabilization and Keynesian Theory", *Post Keynesian Economics*, edited by Kenneth K. Kurihara, New Brunswick, N.J., 1954, Chapter III and "Recent Developments in Canadian Monetary Policy", *American Economic Review, Papers and Proceedings*, Vol. XLIII, 1953, pp. 42-53 and R. Craig MacIvor and John H. Panabaker "Canadian Post-War Monetary Policy 1946 - 1952", *Canadian Journal of Economics and Political Science*, Vol. XX, 1954, pp. 207-26. See also: Report of the Royal Commission on Prices, Ottawa, 1949, Vol. II, p. 168.

independent of that in the United States, could be pursued. The main burden of the task of supporting the government bond market fell to the treasury. In its task, it utilized deposits in 1946 and the proceeds of its surplus and the sale of exchange in 1947.[17] In 1948 the need to devote the surplus to the purchase of exchange limited the support it could give to the bond market, and in the circumstances the Bank of Canada modified its policy.

Other aspects of fiscal policy apart from debt management were important regulators of the flows of funds in the immediate post-war period. Income tax rates were reduced in each of the three years under review and exemptions were raised in 1947. The changes in income tax rates are summarized in Table 4.9; it will be noted that the reductions were substantial.

Table 4.9

PERSONAL INCOME TAXES AS A PERCENTAGE OF INCOME

	Income			
	$1,500	$3,000	$5,000	$10,000
Single, no dependents				
1945	15.8	25.4	33.3	41.4
1948	8.0	14.0	16.7	22.5
Married, two children				
1945	1.5	10.6	20.4	32.2
1948	—9.6[a]	2.9	9.7	17.9

a Children assumed to be eligible for family allowances. Average family allowances have been deducted from the tax paid.

Federal taxes on corporate profits were also reduced in each of the three post-war years. Whereas at the end of 1945, all corporate profits were taxed at the rate of 40 percent and profits in excess of 116⅔ percent of "standard profits" were taxed 60 percent (with one-third of the excess profits tax refundable), in 1948 corporate profits were taxed a flat 30 percent only. We shall not review the details of changes in excise taxes except to remark that in November 1947, as part of the exchange conservation programme taxes on a number of consumer goods imported into Canada, or made in Canada with substantial import content were either imposed or increased. These changes were rescinded at the end of July 1948.

Throughout this period there were special selective controls exercised over investment through the special depreciation allowances granted to some concerns in some industries under the authority of the *Income War Tax Act*. We have mentioned these allowances earlier as they were

17 A new instrument of government finance was introduced in 1946 and has been used ever since; this is the Canada Savings Bond, encashable at par at any time and sold to individuals in limited amounts per person.

initiated in November 1944. In the present connection their designedly discriminatory character is of special interest. The provisions were introduced not to stimulate investment in general, but to stimulate particular kinds of investment. Implicit in the administration of the provisions was a notion of the degree of "essentiality" of particular kinds of investment. Thus, in an official report on the operation of special depreciation provisions in the period under review it is pointed out that:

> "Special depreciation provisions were one of the instruments designed to encourage the rapid expansion of certain industries, particularly manufacturing and some primary industries, in the transition period. Other industries, such as service and commercial establishments were not given the same privileges.....Among the industries that were encouraged to go forward with their investment programs in the immediate transition period were three major groups: a) war industries, particularly in the manufacturing field, in need of conversion to turn out peace time goods; b) basic industries which had delayed programs of modernization and expansion during the war and whose output was urgently needed to provide the materials required for the capital expansion program, exports, and the operation of Canada's manufacturing industries; c) other industries supplementary to the industrial expansion pressing forward e.g., the construction industry and industries of importance for Canada's long term economic development, e.g., commercial shipping.....Precluded from special depreciation allowances were utility enterprises in the fields of transportation, communication, light, heat and power; laundries; garages; warehousing facilities; and commercial and financial establishments engaged in bridging the gap between producers and consumers."[18]

It does not diminish the discriminatory intent to suggest that the postponement of some investment "would contribute to a more stable level of private investment — at least for a period of several years".[19] Thus, to a degree, the role of prices in the capital market, in allocating funds was assigned to the administrators of the income tax regulations in the early post-war period. They were not the only administrators who shared this function; there were still some in the Prices Board and Foreign Exchange Control Board, and some controls over materials survived into the early post-war period.

Before leaving the subject of depreciation allowances we might mention that throughout the years under review there have been various depletion allowances and tax credits granted the mining, oil and gas industries in respect of exploration and off-property drilling expenses "in order to encourage the continued search for new sources of minerals, oil and gas".

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18 *Encouragement to Industrial Expansion in Canada: Operation of Special Depreciation Provisions, Nov. 10, 1944 - March 31, 1949,* Department of Reconstruction and Supply, 1948, pp. 27-28.

19 *Ibid.*, p. 27.

If prices in the capital market were rendered impotent by official policy, prices in the goods and services markets were allowed progressively to resume their allocative function in the post-war transition period. Wage controls were first eased and then finally removed during 1946. Price controls administered by the Wartime Prices and Trade Board were progressively relaxed following the removal of the price ceiling on several hundred items in February 1946. It is not necessary for us to detail here the successive steps in the policy of dismantling the price ceiling; the first steps released from control items that were not necessities nor major items of expenditure in the ordinary consumer's budget. Each wave of relaxations removed the ceiling from items of more consequence to the ordinary consumer. Rents were one of the last items controlled by the federal authorities. At the time of the exchange conservation measures in 1947 there was a brief resumption of control over a few commodities affected by import restrictions.

Official control of the rate of exchange of the Canadian dollar for United States dollars and for pounds sterling was maintained by the Foreign Exchange Control Board throughout the three early post-war years. In July 1946 there was a major revaluation of the Canadian dollar; expressed in official buying rates, the value of the Canadian dollar in terms of the United States dollar was raised from a 10 percent discount to parity and was pegged at parity through the remainder of the period. When official reserves of gold and United States dollars were slashed by more than 60 percent in 1947, devaluation was not undertaken, rather, a wide range of direct control measures was instituted. The Foreign Exchange Control Board tightened its control over the use of United States dollars, special sales taxes were imposed on imported goods or goods made in Canada with substantial amounts of imported materials, export controls prohibiting the export of a number of commodities to the United States were removed, imports of some consumer goods were banned altogether, others were allowed entry under quotas, and capital goods were permitted entry only under licence after a review of the construction programme giving rise to them. Perhaps more important than any one of these measures, in contributing to the revival of reserves, was the drastic cut in the rate of lending abroad. In the control of imports of capital goods under the Emergency Exchange Conservation Act we find another example of administrative direction of the capital development programme. The objectives of the administration of the restrictions on capital imports were set out officially as follows:

> " . . . to stimulate the manufacture in Canada of more of the goods which are normally imported in considerable volume from the United States, in fields where Canadian costs are low and competitive and where Canadian manufacture is economic.

> ... to increase exports of products of the manufacturing industries and of the basic industries.
>
> ... to modernize and improve the pattern of articulation of Canadian industry.[20]
>
> ... to effect the reduction of United States content in all Canadian manufactured commodities, particularly in the branch plant field.
>
> ... to assist in the development of services essential to the public welfare. Hospitals and essential educational buildings are a *(sic)* case in point".[21]

There may be some doubt as to the precise meaning of these objectives as stated above, but there can be no doubt that they imply allocation of scarce resources (and by implication, funds) by men rather than markets.

c. Concluding observations

In the early post-war years employment was maintained at satisfactorily high levels in spite of the need to reabsorb very large numbers of veterans and war workers in civilian jobs. There was a very substantial growth in the productive capacity of the economy which paid dividends in terms of increased consumption per head and which was destined to pay further dividends in the years to come. The objective of containing inflation was not satisfactorily achieved however. Inflation of yields in the capital market was indeed prevented, but inflation in the prices of goods and services was not avoided. The value of the Canadian dollar on the foreign exchange market was only maintained at the cost of retaining and imposing extensive direct controls on transactions in that market.

While prices were conceded an increasing role in the goods market through the removal of price ceilings and associated controls, the same was not true of the capital market and the exchange market. The rigid control of the yield of government bonds affected yields in many other quarters of the capital market. The period is not the best one in which to study the performance of the capital market in directing the flows of funds.

3. 1949-51: Stability followed by growth with rising prices

In the second triennium of the post-war period the economy experienced another wave of inflation. This wave was stimulated to a considerable extent by the impact of the Korean War. The first year of the period was however a quiet one; real output rose by 3 percent and wholesale prices drifted gently downward. In the latter two years real output advanced by 6 percent per annum, wholesale prices rose over 40 percent (they started to fall in the third quarter of 1951) and consumer prices rose

[20] This cryptic aim was amplified somewhat by three sentences one of which was: "Iron and steel, basic to the entire industrial structure, needs to be rounded out and expanded".

[21] *Report on the Administration of the Emergency Exchange Conservation Act, Schedule III, November 17, 1947 to December 31, 1948*, Department of Trade and Commerce, Ottawa, 1949, pp. 4-5.

nearly 20 percent. Rises in prices were not confined to Canada; they were worldwide and were particularly large in the case of some raw materials. The exchange "crisis" of this second period was not one of a shortage but rather a surfeit of United States dollars.

Foreign loans by the Canadian government were not a major factor in the economic situation in this period; indeed Canada became a net importer of capital after 1949. Transactions in federal debt remained of considerable importance in this period, and the federal debt, direct and guaranteed, was reduced by $1.1 billion. However, the relation of these transactions to monetary policy in general was not the same as in the earlier period we have discussed.

The period we are about to review is especially significant in that during the second post-war wave of inflation, there was no rigid policy of maintaining a floor under government bond prices, and in that the policy of exchange control as it had been practised since 1939 was gradually abandoned. Monetary policy was much more active and appropriate, and was not restricted to open-market operations in the federal bond market by the Bank and the government accounts; the Bank and the treasury used direct controls over the extension of credit which had never been used, or had never been used in peacetime in Canada, before. The "flood" of United States dollars in the early fall of 1950 was the immediate motivation for freeing the exchange rate, but by the end of 1951 the activities of the Foreign Exchange Control Board were terminated and official action in the exchange market was confined to the stabilizing moves of the Exchange Fund Account. Thus, progressively during this second period, interest rates and exchange rates were given freer rein to assist in limiting the demand for and in allocating the supply of scarce resources.

a. Economic activity and its financing — a review of the aggregates

Over the three years 1949 to 1951, GNE rose by 18 percent in real terms and 40 percent in current dollars. Government expenditure in each of the three years showed larger percentage increases, in both constant and current dollars than consumer expenditure, investment expenditure, exports or imports. Government expenditures on goods and services increased about 82 percent over the three years in current dollars; a little over half of that in constant dollars. The major surge of government expenditure came in 1951. Private investment expenditure, (excluding inventories) rose by 51 percent in current dollars over the three years. Its rate of increase, both in real terms and in terms of current prices, was very much smaller than in the three years immediately following the war when, the reader will recall, it rose by over 150 percent in current prices. This lower rate of increase characterized all three major categories of private investment; indeed, in 1951 expenditures on residential housing fell 13 percent in real terms, below the level of the previous year (though they rose 1

percent in current values). Non-residential construction was the strongest category of fixed investment expenditures. The rates of increase of residential construction were lower in 1950 than in 1949, and lower again in 1951; those of non-residential construction were about the same in 1950 as in 1949, but somewhat higher in 1951 than in 1950. The rates of increase of expenditures on machinery and equipment were lowest in 1950, and higher in 1951 than in 1949. There was an enormous build-up of business inventories in 1951 amounting to over $1.5 billion. Consumer expenditures increased by about 13 percent in real terms and 33 percent in current values over the period, as compared with increases of 13 percent and 45 percent respectively over the first three post-war years. Exports, after declining in 1949, rose gradually thereafter and realized a 5 percent real gain and 26 percent gain in current values over the period. This represented a smaller real gain but larger current value gain than in the previous three years. Imports rose more rapidly than exports, especially in real terms though they rose slowly in 1949. At 54 percent the current value gain in imports was about twice as great as in the first three post-war years. The details of the percentage changes in gross national expenditure and its main components, in the years 1949 to 1951, are shown in Table 4.10.

The years presently under review were years of high employment. Though the United States experienced a mild recession in 1949 our economic indicators did not reveal any developments that could legitimately be so described. There were not such acute labour shortages as in 1948 but the level of unemployment, as far as our statistics can indicate it, was less than 3 percent of the labour force throughout the year. The gains in real output over the period were more rapid than in the previous three years. Since this was also true of output measured in current prices, there was, in the sense in which we use the terms, more economic activity to be financed. The growth in expenditures on current output was, however, more evenly spread among the sectors of the economy than in the first post-war period.

A review of the balances of saving over investment by sectors shows that consumers, and the federal and provincial governments, had positive balances throughout the period except in 1949 when provincial governments had a very small deficit. The rest of the world developed a positive balance for the first time in 1950, which grew to the very considerable size of $525 million in 1951. Municipal governments and all three of our non-financial business sectors were deficit sectors between 1949 and 1951. The details of these balances are shown in Table 4.11.

Consumer saving was $926 million in 1949, dropped to $662 million in 1950[22] and then rose again to over $1.3 billion in 1951. In the unincor-

[22] In 1950, we find residual credits for the consumer sector are very high amounting to the unsatisfactory figure of $644 million. We must recognize and emphasize that our statistical information is inadequate, and at this stage we simply do not know where the errors lie, whether in the records of financial transactions or non-financial transactions or both.

Table 4.10

PERCENTAGE CHANGES IN GROSS NATIONAL EXPENDITURE AND ITS MAIN COMPONENTS 1949 TO 1951

Categories of Expenditure	1949 over 1948		1950 over 1949		1951 over 1950		1951 over 1948	
	Constant dollars	Current dollars	Constant dollars	Current dollars	Constant dollars	Current dollars	Constant dollars	Current dollars
Gross national expenditure	4	8	7	10	6	18	18	40
Personal expenditure on consumer goods and services	5	8	7	10	2	12	13	33
Government expenditure on goods and services	12	18	5	10	25	40	48	82
Business gross fixed capital formation	10	16	4	10	4	18	20	51
New residential construction	24	30	5	11	—13	1	14	47
New non-residential construction	8	13	7	13	9	22	26	56
New machinery and equipment	4	10	2	8	11	26	18	50
Exports	— 4	— 1	— 1	4	10	22	4	26
Imports	3	6	9	17	11	24	25	54

porated business sector, though expenditures on housing advanced only moderately, the deficit rose by $700 million, $1 billion and $1.1 billion respectively in the three years. Non-financial corporations appear to have had a very small deficit of only some $75 million in 1949 though a rather larger one of $385 million in 1950.[23] There can be no doubt that the deficit of this sector jumped substantially in 1951; our records show it at $1,426 million. Government enterprises showed deficits ranging between $205 million and $370 million over the period.

The federal government surplus at $480 million in 1949 was lower than in the preceding two years, and lower than in the succeeding two years. In 1950 it was $635 million and in 1951 it reached its highest post-war figure, just over $1 billion. Provincial governments collectively had a deficit of $1 million in 1949, and surpluses of $63 million and $78 million in 1950 and 1951. Municipal governments collectively ran deficits of between $106 million and $114 million in each of the three years.

As we have noted, the rest of the world again became a net supplier of funds to the Canadian economy in 1950. The programme of official contributions ended, to all intents and purposes, in 1949, and in 1950 and 1951 direct investment and portfolio investment by foreigners in Canadian enterprises and junior governments achieved very significant proportions.

The total value of currently-produced goods and services was higher in this second post-war period than in the first. The financing of this increasing flow of output required increases in the flows of funds in the economy. There were of course large transfers of funds from the private sector of the economy to government through taxes, and in the other direction too through social security payments and other channels, and there were transfers among governments as well. But these transfers are reckoned either as additions to or substractions from saving out of current income. Beyond this there were transfers of the balances of saving over investment. The sum of the net balances of saving over investment for all surplus sectors rose from $1.1 billion in 1946 to $3.0 billion in 1951. This is no measure of the gross flow of funds; neither is it a measure of the net flow. In the absence of complete to-whom-from-whom information on the flows of funds we may use saving over investment balances to indicate whether each sector, on balance, supplied funds out of current income to other sectors or supplemented current income by attracting funds from other sectors. Some surplus sectors supplied funds to other surplus sectors as well as to deficit sectors and some deficit sectors attracted funds from other deficit sectors as well as from surplus sectors. The total of the

23 We use rather guarded language because, as we have noted, our figures for sectors I, II and III (consumers, unincorporated business and non-financial corporations) considered separately are weak. We have remarked on the large residual in the consumer sector in 1950; in sector III residual credits were $304 million in 1949 and – $148 million in 1950. We show no residual in sector II as the balancing item in the financial account of this sector is taken as an estimate of the change in the investment of consumers in unincorporated enterprise.

surpluses of the surplus sectors (or the total of the deficits of the deficit sectors) grew, however, in each year from 1946 to 1951, with the exception of 1949 and was, in 1951, some 178 percent higher than in 1946 and was about twice as high in 1951 as in 1949. Let us now review in broad terms the channels through which these funds flowed in the years 1949 to 1951, considering each sector in turn. The general picture is portrayed in Tables 4.12, 4.13 and 4.14; for further details the reader may consult the tables given in Part VI below.

Table 4.11

BALANCES OF SAVING OVER INVESTMENT, 1949-51

(millions of dollars)

Sectors	1949	1950	1951
I Consumers	926	662	1,334
II Unincorporated business	— 690	—1,008	—1,077
III Non-financial corporations	— 75	— 385	—1,426
IV Government enterprises	— 371	— 205	— 362
II-IV Non-financial business	—1,136	—1,598	—2,865
V Banking	21	17	15
VI Life insurance	—	— 1	— 3
VII Other finance	— 16	5	10
V-VII Financial business	5	21	22
VIII Federal government	480	635	1,021
IX Provincial governments	— 1	63	78
X Municipal governments	— 106	— 113	— 114
VIII-X Government	373	585	985
XI Rest of the world	— 168	330	524

In our review of the first three post-war years we noted the principal channels through which funds flow to and from the consumer sector. Let us first compare the flow through these channels in the first two post-war periods, considering each period as a whole. The increase in deposits was considerably larger in the first period; the flow of funds from the consumer sector through insurance and pension contributions was slightly higher in the second period, but the purchases of mortgages, non-federal bonds, stocks and the investment in unincorporated business all increased substantially in the second period as compared with the first. Investment in mortgages increased by $180 million to reach $490 million for the 1949-51 period; investment in non-federal bonds and stocks increased $580 million to reach $890 million and investment in unincorporated business increased from $470 million in the first period to $1,254 million in the second. The consumer sector reduced its holdings of federal bonds by some $450 million, (of the order of one-half of the reduction in the first period) and received accommodation from banks, instalment creditors, retail dealers, and other lenders to about the same extent ($445 million) as in the first period. It will be noted that bank loans to consumers

Table 4.12

ABBREVIATED NATIONAL TRANSACTIONS ACCOUNTS

1949

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
I Transactions Recorded in the National Accounts												
Services of factors of production	262	11,906	10,811	—	—	—	1,559	419	83	390	12,715	12,715
Transfers	1,028	971	2,596	—	—	—	1,302	3,955	—	—	4,926	4,926
Goods and services, n.e.i. (net)	10,661	—	—	—	—	15,357	597	—	3,938	3,463	15,196	18,820
Saving	926	—	1,950	—	—	—	916	—	—168	—	3,624	—
Investment	0	—	3,081	—	—	—	543	—	—	—	3,624	—
Saving — Investment	926	—	—1,131	—	—	—	373	—	—168	—	0	—
Total (ex. Saving)	12,877	12,877	15,357	—	—	15,357	4,374	4,374	3,853	3,853	36,461	36,461
II Transactions Not Recorded in the National Accounts												
Saving — Investment (carried)	—	926	—	—1,136	—	5	—	373	—	—168	—	0
Currency and deposits: Domestic	309	—	55	—	25	312	—110	5	37	—	317	317
Other (incl. gold and foreign deposits)	—	—	—20	—	168	57	13	—	—	104	160	160
Instalment credit and charge accounts	—	100	55	9	54	—	—	—	—	—	109	109
Loans: Bank	—	24	—	55	95	15	—	—3	—	4	95	95
Other	—	41	—	—2	33	1	114	—4	—	111	147	147
Mortgages	117	—	—	428	225	—	26	—	—	—	428	428
Bonds and Stocks: G. of C. bonds	—297	—	—64	28	—45	—	—344	—768	10	—	—740	—740
Other bonds and stocks	233	—	—13	352	399	51	46	204	—37	21	628	628
Insurance and pensions	308	—	—	—2	—	242	—	68	—	—	308	308
Claims on associated enterprises	306	—	257	707	—70	235	282	1	94	—74	869	869
Other transactions and errors	64	9	220	51	35	2	62	213	68	174	449	449
Total	1,100	1,100	490	490	919	919	88	88	172	172	2,770	2,770

Table 4.13

ABBREVIATED NATIONAL TRANSACTIONS ACCOUNTS

1950

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
I Transactions Recorded in the National Accounts												
Services of factors of production	276	12,629	11,596	—	—	—	1,612	471	91	475	13,575	13,575
Transfers	996	1,055	3,062	—	—	—	1,463	4,466	—	—	5,521	5,521
Goods and services, n.e.i. (net)	11,750	—	—	—	—	16,979	705	—	4,092	4,038	16,547	21,017
Saving	662	—	2,321	—	—	—	1,157	—	330	—	4,470	—
Investment	0	—	3,898	—	—	—	572	—	—	—	4,470	—
Saving — Investment	662	—	—1,577	—	—	—	585	—	330	—	0	—
Total (ex. Saving)	13,684	13,684	16,979	—	—	16,979	4,937	4,937	4,513	4,513	40,113	40,113
II Transactions Not Recorded in the National Accounts												
Saving — Investment (carried)	—	662	—	—1,598	—	21	—	585	—	330	—	0
Currency and deposits: Domestic	231	—	172	—	81	784	98	7	210	—	791	791
Other (incl. gold and foreign deposits)	—	—	—14	—	289	150	—22	—	—	103	253	253
Instalment credit and charge accounts	—	151	65	23	109	—	—	—	—	—	174	174
Loans: Bank	—	111	—	329	500	43	—	17	—	—	500	500
Other	—	44	—	6	40	—3	—41	2	—	—50	—1	—1
Mortgages	205	—	2	546	330	—	9	—	—	—	546	546
Bonds and Stocks: G. of C. bonds	72	—	133	29	—341	—	125	113	153	—	142	142
Other bonds and stocks	352	—	—50	547	910	111	40	232	99	461	1,351	1,351
Insurance and pensions	322	—	—	—	—	260	—	62	—	—	322	322
Claims on associated enterprises	407	—	386	1,083	17	660	702	1	222	—8	1,734	1,734
Other transactions and errors	79	700	681	410	136	45	187	80	57	—95	1,140	1,140
Total	1,668	1,668	1,375	1,375	2,071	2,071	1,097	1,097	741	741	6,952	6,952

Table 4.14

ABBREVIATED NATIONAL TRANSACTIONS ACCOUNTS

1951

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
I Transactions Recorded in the National Accounts												
Services of factors of production	318	15,101	13,809	—	—	—	1,843	534	115	450	16,085	16,085
Transfers	1,366	1,059	3,968	—	—	—	1,501	5,776	—	—	6,835	6,835
Goods and services, n.e.i. (net)	13,142	—	—	—	—	19,807	1,212	—	4,974	5,163	19,328	24,970
Saving	1,334	—	2,030	—	—	—	1,754	—	524	—	5,642	—
Investment	0	—	4,873	—	—	—	769	—	0	—	5,642	—
Saving — Investment	1,334	—	—2,843	—	—	—	985	—	524	—	0	—
Total (ex. Saving)	16,160	16,160	19,807	—	—	19,807	6,310	6,310	5,613	5,613	47,890	47,890
II Transactions Not Recorded in the National Accounts												
Saving — Investment (carried)	—	1,334	—	—2,865	—	22	—	985	—	524	—	0
Currency and deposits: Domestic	333	—	—121	—	128	61	—77	7	—196	—	68	68
Other (incl. gold and foreign deposits)	—	—	27	—	286	45	21	—	5	294	339	339
Instalment credit and charge accounts	—	—64	—47	37	20	—	—	—	—	. .	—27	—27
Loans: Bank	—	—19	—	288	229	—46	—	6	—	—	229	229
Other	—	56	2	40	55	1	—55	—10	25	—60	27	27
Mortgages	108	—	5	511	390	—	8	—	—	—	511	511
Bonds and Stocks: G. of C. bonds	—220	—	—114	—48	—210	—	177	—485	—166	—	—533	—533
Other bonds and stocks	302	—	62	460	—85	138	81	448	431	—255	791	791
Insurance and pensions	309	—	—	—	—	251	—	58	—	—	309	309
Claims on associated enterprises	541	—	413	1,595	15	302	645	—4	309	30	1,923	1,923
Other transactions and errors	76	140	794	1,004	—35	19	209	4	77	—46	1,121	1,121
Total	1,448	1,448	1,021	1,021	794	794	1,009	1,009	486	486	4,758	4,758

and instalment credit and charge accounts were all reduced in 1951. From an increase of $261 million in 1950 the figures for these categories in the consumer sector changed to a decrease of $83 million in 1951 reflecting the impact of credit controls to be described below.

The non-financial business sector had a much larger deficit in the second post-war period than in the first as we have already noted. Its withdrawals from other sectors, through the usual channels were all larger than in the first period except that (a) the increase in bank loans was only some $70 million higher than in the first period (again reflecting the effects of monetary policy) and (b) the net proceeds from the sale of federal government bonds (direct and guaranteed) was very much smaller, being of the order of $45 million over the three years as compared with $460 million in the first period. We have noted that the investment of the consumer sector in unincorporated business increased by about $800 million more in the second period than in the first; the investment of government in government enterprises increased by some $530 million in the second period as compared with $150 million in the first; and direct investment of other sectors, including the rest of the world in non-financial corporations, increased from $130 million to $578 million. A very much larger net amount, (over $700 million more, in fact) was raised through net sales of stocks and non-federal bonds, and about $690 million more was raised through mortgages than in the first three years. Bank balances were built up by nearly $200 million in the first two years of the period but were drawn down by $100 million, more or less, in 1951. The raising of money for non-financial business through sale of stocks and non-federal bonds, and mortgages and through bank loans was higher in 1950 than 1951, whereas the net acquisition of funds through the category "claims on associated enterprises" was higher in 1951 than in 1950 or 1949. In 1950, non-financial business was a net purchaser of federal bonds.

In the financial accounts of the federal government the transactions in federal bonds again bulk very large. The direct debt of the federal government was decreased by roughly $1.1 billion over the three-year period. The major reduction, $768 million, took place in 1949. The rest occurred in 1951. In 1950 there was a net increase in debt of $113 million; retirements of non-banking issues were offset by an increase of $300 million in direct banking issues. At least two-thirds of the direct issue to banks in that year was made to assist in financing the "flood" of United States dollars. The special government accounts sold federal securities in 1949 in the amount of $370 million, but bought in amounts of $55 million and $180 million in 1950 and 1951 respectively. Federal government investment in associated enterprises was substantial in each of the three years. In 1949 the total investment of $180 million was more than accounted for by an investment of $125 million in the Exchange Fund and $93 million in Central Mortgage and Housing Corporation. In 1950, the

Exchange Fund required $517 million to finance the "flood" (this was almost exactly the amount invested in the Fund in 1948) and $118 million went to Central Mortgage and Housing Corporation. In 1951 the Exchange Fund claimed $217 million and the Central Mortgage and Housing Corporation $46 million. The government's programme of lending to foreign governments claimed $111 million in 1949, but in the next two years repayments on these loans provided a source of funds to the federal government. In 1950 and 1951 the item "taxes receivable" achieved significant proportions.

The rest of the world accounts show this sector as a net investor in Canadian governments and enterprise after 1949. Direct investment in Canadian concerns, positive in all three years, totalled $625 million in the period. Non-residents bought about $164 million worth of federal securities in 1949 and 1950, especially the latter, but in 1951 sold almost this exact amount. In 1949 non-residents were net sellers of stocks and non-federal bonds in Canada, but became progressively heavy buyers in the last two years, buying $99 million in 1950, and $431 million in 1951. Provincial government bonds were sold particularly heavily to non-residents in 1951. They bought nearly $220 million worth. Municipalities also sold over $60 million worth of their securities to non-residents in 1951. Consumer saving through life insurance averaged $240 million over the period 1949-51; this figure was a little higher than the average of $210 million in the first post-war years. In the second period the life insurance companies continued the policy of selling Government of Canada bonds which they had begun on a small scale in 1947. Between the end of 1948 and the end of 1951 the life insurance companies reduced the federal bonds in their portfolio by just under $550 million and increased mortgages by nearly $490 million. They were heavy investors in bonds other than those of Canadian governments — the total for the period being $544 million, and they also increased their investment in bonds of Canadian provinces and municipalities by $220 million. Their portfolio of stocks was increased by $5 million over the first two years of the period, but reduced by $7 million in 1951.

We may review the changes in the balance sheets of the chartered banks rather briefly, as we shall refer to their activities again in the discussion of monetary policy immediately below. Canadian deposits of the banks increased by approximately $660 million over the years 1949 to 1951. This was a much smaller increase than the $1,020 million of the first three post-war years. In 1951 deposits actually decreased by some $90 million, and this was the only calendar year in which deposits showed a decrease in the entire post-war period.[24] Bank loans increased by only $95 million in 1949 but rose by the substantial sum of half a billion in

24 This statement covers the years 1946 to 1956 inclusive. This statement should not be interpreted to mean that in no months or quarters of the post-war period, save those or some of those in 1951, was there a decrease in deposits.

1950. The increase in 1951 was about $230 million. In 1949 the banks were net buyers of Government of Canada bonds to the extent of $153 million, but in 1950, in spite of absorbing $300 million worth of deposit certificates, they were net sellers of federal securities to the extent of $32 million. In 1951 they were heavy net sellers, selling an amount of $325 million.[25] In that year they decreased their holdings of all other kinds of securities to the extent of almost $115 million.

In summing up our sketch of the flows of funds in the first post-war period, we remarked above, in part, that "the federal government's demand for goods and finance which had dominated the economic scene in wartime, was replaced by the demand for goods and finance by the rest of the economy". In the second post-war period, the federal government not only supplied finance to the rest of the economy (though the programme of foreign loans did not extend beyond 1949) it also very substantially increased its demand for goods. While it increased its expenditures on goods and services by $1.5 billion, it reduced its debt by $1.1 billion, which was more than the reduction made during the first three post-war years. The broad picture, then, is of government exerting pressure on the economy both directly and indirectly — directly by increasing its demands for real goods and services and indirectly by returning taxes to bondholders and thus supporting the demands of others for real goods and services. This is the main change in the broad pattern of flows in the second period. There were other changes. Consumers and non-financial corporations were not net sellers of government bonds to nearly the same extent in the second period as in the first; together they sold in amounts of $1,278 million in the first period of $490 million in the second. But the life insurance companies and other financial institutions (apart from banks) became very important sellers, their sales amounted to $566 million, and by virtue of this they were able to increase greatly their holdings of corporate securities, securities of other governments, and of course, mortgages. The rest of the world, as we have remarked, became a net supplier of funds and the supply flowed directly to corporations and junior governments in many cases. No sector of the economy was forced to reduce its demands for goods in this period. The flow-back of funds from the government to the rest of the economy, directly to spenders, indirectly through banks in 1951, and rather more than in the previous period indirectly through insurance companies and other non-banking institutions, enabled the rest of the economy to compete more effectively with the government for the fruits of increased productivity. But effective demand in total increased more than real output and the inevitable consequence was inflation especially in 1950 and the first six or seven months of 1951. Let us now turn to consider the regulators of the flows of funds in this second post-war period.

25 It may be noted here that the Bank of Canada bought $256 million worth of federal bonds in 1951, while the government accounts also took up about $180 million worth.

b. The regulators of the flows of funds

Turning first to monetary policy and policy with respect to the federal government debt, we recall that in 1949 the United States experienced a mild recession from which recovery began in the latter half of the year, while in Canada we enjoyed moderate gains in real output with no substantial changes in prices. During this year, long-term government bond yields remained fairly steady for the first half of the year. At June 15th, the 15-year theoretical bond yielded 2.89 percent, but by November 15th it had fallen to 2.69 percent; the yield rose slightly by December 15th. Treasury bill yields rose gradually through the first seven months and then remained steady. The banks increased their loans but by much less than in the previous year, even though in February the Bank of Canada withdrew its suggestion of twelve months earlier that bank credit not be supplied to finance capital expenditure. A considerable increase in the banks' portfolio of government bonds took place over the first part of the year. Toward the end of the year, the banks began to switch into loans and out of federal securities, and they experienced declining daily average reserves and lower daily average cash reserve ratios. The net result of monetary and debt policy in this year was a considerable decline in outstanding government debt, held outside of the banks; but in the consumers' and non-financial corporations' sectors, the decline in government debt holdings was rather more than offset by increases in deposits at banks or other institutions, and this moderate increase in liquidity must be rated as salutary in the circumstances.

The year 1950 brought rather severe problems of monetary control. The problems of defending the economy against the inflationary pressures engendered by the Korean War and the anticipatory buying which accompanied its start were severely aggravated in the fall by a substantial and mostly speculative inflow of American dollars. The problem of financing this very large and sudden acquisition of United States dollars required ingenuity and prompt decision.

Wholesale prices began to rise in Canada in January of 1950. The recovery of economic conditions in the United States was matched by a general strengthening in the demand for goods and services in Canada. The inflow of United States dollars had been proceeding since September 1949 when Canada, independently, though at about the same time as many other nations, reduced the value of her currency in relation to the United States dollar.[26] For a time the inflow was financed almost entirely out of the government's current surplus and by a net drawing down of the government's deposits with the banking system, but in August and September the inflow amounted to \$184 million and \$285 million respectively and special measures had to be adopted. The exchange rate was set free as of October 2nd and that stopped speculation, but official stabilization measures

[26] The buying rate for U.S. dollars was increased on September 20, 1949, to \$1.10 (Canadian).

raised official reserves by another $37 million (net) in October. The special measures included the sale of deposit certificates in the amount of $200 million to the chartered banks, at the end of August (in addition to the $100 million worth of certificates sold to them in March and retired on August 30th), and the purchase of foreign exchange assets by the Bank of Canada in the amount of $393 million during August, September and early October. The Bank partly offset these purchases by the net sale of government securities to the extent of $337 million in this period.

During 1950 the banks had daily average reserves very little higher than in 1949, but on the average they operated with a considerably lower cash ratio. In the latter part of the year they began to run off their government bonds and they increased their loans enormously. Between the end of August and the end of November they increased their loans by $416 million. At the beginning of October the Bank of Canada indicated its attitude to the developing inflationary pressures by raising Bank Rate from 1 percent ot 2 percent, a move which at that time[27] had little significance other than as a notice of the Bank's official view. Long-term bond rates began in November to reflect the increases in bill rates and shorter term bond rates that had begun to move up in August under the impact of the Bank's heavy open market sales. The gap between long and short rates was narrowed during the year. The end of the year found consumers and non-financial corporations in a considerably more liquid position (as measured by their deposits and holdings of government bonds) than at the end of 1949.

In 1951, wholesale prices continued to rise until after mid-year and consumer prices rose throughout the year, but inflationary pressures in the economy eased considerably in the second half. The central bank contrived to reduce the chartered banks' reserves by about $40 million in the first half of the year. This was accomplished largely through the transfer of government deposits which were built up with the accumulating budget surplus, to the Bank of Canada and their use to purchase for the Exchange Fund the foreign assets which the Bank had acquired during 1950. (The Bank itself bought government securities in the amount of $240 million.) The daily average cash reserve ratio of the banks in the first half of the year was 9.8 percent, a comparatively low figure. In the second half of the year there was a considerable easing of the cash position of the banks; the Bank of Canada purchased government securities in substantial degree though the reductions in their holdings through a maturity in November resulted in the net increase for the six months appearing rather slight. Cash reserves of the banks increased nearly $125 million and the daily average cash position was 10.6 percent in the last half of 1951.

One of the most notable developments in monetary policy in 1951 was the agreement effected with the banks in February whereby the banks

[27] It was a few years later, in 1954, when changes in Bank Rate came to have operative significance.

once again agreed to refrain from making term loans, and also undertook to try to achieve "the desired objective of avoiding further over-all increase in the banks' total loans and non-government investments".[28] It was further arranged with the banks and the stock exchanges that margins of at least 50 percent be required for loans to carry corporation stocks and it was arranged with the banks that margin requirements would be "substantially increased" for loans on the security of instalment finance paper, and that the total of such loans would not be increased. Bank loans, which as we have noted rose remarkably in late 1950, scarcely showed the normal seasonal decline over the turn of the year, and while the honouring of previous commitments led to some further increase in 1951, the policy achieved some success. It might be argued that if a ceiling on loans were necessary in the circumstances it was imposed rather late, and that some of its apparent success might be attributed to the easing of demand in the latter part of 1951. But such reflections illuminated by hindsight can hardly alter the broad fact that during the second wave of inflation in the post-war period, monetary policy was much less inflexible, and more appropriate. The ceiling on bank loans was however, a very drastic measure. It was adopted as an alternative to a policy of allowing interest rates to rise further. Of course the monetary authorities have to work within the restriction of a fixed ceiling on bank loan charges, but there is no statutory ceiling on government bond yields. One suspects that, as in the earlier and later post-war waves of inflation, the monetary authorities were worried, and perhaps too worried, over the effects on bond dealers and borrowers of funds of a more rapid rise in interest rates. In any event, the use of government surpluses to retire debt in the latter part of 1950 had the effect of restraining the rate of increase in interest rates. Had the government refunded maturing issues and left the proceeds on deposit with the chartered banks, interest rates would have risen considerably more sharply.

Changes in fiscal controls were consistently moving in the right direction in the second post-war period. Taxes were lowered in the 1949 budget; a special budget was brought down in September of 1950 to raise corporation taxes and some sales taxes, and in the budget of April 1951, there were further increases of taxation on persons, corporations and some commodities.

An indication of the changes in the personal income tax rates is given in Table 4.15. We need not elaborate on them here, but we must record that it was in 1949 that the first step was taken to eliminate the double taxation of corporate dividends characteristic of Canadian taxation. Provision was made for deducting from a person's total tax liability 10 percent of the dividends received from non-preference shares in Canadian corporations liable to corporation tax.[29]

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28 Bank of Canada, *Press Release*, February 22, 1951.

29 Though this was the provision as described in the budget speech, no distinction between preference and non-preference shares was made in practice.

Table 4.15

PERSONAL INCOME TAXES AS A PERCENTAGE OF INCOME

	Income			
	$1,500	$3,000	$5,000	$10,000
Single, no dependents				
1948	8.0	14.0	16.7	22.5
1949	5 0	10.7	14.0	19.6
1950	5.0	10.7	14.0	19.6
1951	5.5	11.7	15.4	21.6
Married, two children				
1948	0	7.7	12.6	19.3
1949	0	3.5	9.1	15.8
1950	0	3.5	9.1	15.8
1951	0	3.9	10.0	17.4

NOTE: The above figures show the actual tax liability of a taxpayer with children who receive family allowance, but average family allowances have *not* been deducted from tax paid. It is assumed that all incomes are entirely earned incomes.

Corporation taxes were modified in structure in 1949 and the burden on smaller businesses was decreased by the change from a straight 30 percent rate on all profits to a rate of 10 percent on the first $10,000 of profits and 33 percent on all profits over $10,000. In 1949 it was made optional for business to adopt the diminishing balance method of claiming depreciation, rather than the straightline method that had been obligatory before.[30] The allowable rates of depreciation were changed accordingly but in general the diminishing balance method permits more rapid "write-offs" during the early life of assets that the straightline method, and thus might well encourage some types of investment expenditures. In the special budget of 1950 corporation income taxes were raised to 15 percent on the first $10,000 of profits and to 38 percent on profits above that figure. In the budget of April 1951, corporation taxes were raised still further; with the addition of a special surtax of 20 percent on profits over $10,000 the effective rate of tax on profits over that figure was raised to 45.6 percent. It was in this budget too, that as a further anti-inflationary move the principle of deferred depreciation was introduced. By this principle the right to charge depreciation on capital assets acquired after the budget date was deferred for four years. There were exceptions. Some classes of assets were automatically exempted such as those for the production or distribution of electricity, gas, water, and oil, or for the provision of telegraph and telephone services, or for lumbering or for the use by individuals in farming, fishing and professional service. Others were made eligible for current depreciation when so certified by the Minister of Trade and Commerce.[31] In the budget speech, the Finance Minister introduced the measure as a deterrent to capital investment and remarked:

30 Farmers and fishermen were not given the option until 1950.

31 For a report of the administration of the regulations by the Department of Trade and Commerce, see the *Annual Report* of that department for the year 1954, pp. 75-86. See also Mitchell W. Sharp, "Deferred Depreciation – A Canadian Anti-Inflationary Measure", *The Journal of Finance*, Vol. VII, 1952, pp. 331-46 and "Deferred Depreciation, A Further Assessment", *Canadian Tax Journal*, Vol. I, 1953, pp. 277-83.

"The deterrent will particularly affect businessmen whose decision to make a capital expenditure is strongly influenced by the expectation that he can write off a large fraction of his cost at a time when both tax rates and profits are abnormally high.....it will compel the businessman to give primary attention to the long-term prospects of proposed capital expenditures and if outside financial participation is required, lenders will also take this view".

There were changes in sales taxes in the budgets we have been reviewing, but we shall not detail these except to remark that in the special budget of 1950 and the budget of 1951 there were increases in sales taxes in support of the objectives of the consumer credit controls to which we now turn.

In November 1950, when inflationary pressure was building up very rapidly, the government under the Emergency Powers Act introduced legislation to restrict consumer credit. Under this legislation, consumers were compelled, if financing their purchases, to "pay down" at least one-third of the purchase price of cars and one-fifth of the purchase price of other items and to pay the balance in 18 months. In March 1951, these regulations were tightened. Down payments were raised to one-half and one-third in the cases of cars and other goods respectively, and the period of financing was reduced from a year and one-half to one year. The flow of credit to consumers was affected by this measure, and by the ceiling on bank loans, particularly loans to finance companies. Bank loans to instalment finance companies, after a rise of $15 million in the first quarter of 1950 climbed only slowly until the last quarter when they rose by $17 million. In the first quarter of 1951 they rose by $30 million, but then in the balance of 1951 they fell by almost $75 million. The figures of selected items of consumer credit outstanding, compiled by the Bank of Canada,[32] showed a rise in the total of the items of $260 million in the last three quarters of 1950 and a fall of about $100 million in the first three quarters of 1951.

There were other regulatory measures adopted with the aim of controlling the second post-war wave of inflation. For example in September 1950, at the time consumer credit controls were forecast, it was also announced[33] that loans under the Farm Improvement Loans Act would henceforth have to finance a smaller proportion of the total expenditure involved and be repaid in shorter periods. Slightly earlier, the Central Mortgage and Housing Corporation took the decision not to recognize increased costs when establishing lending values of new houses and thus effectively increased the down payments on housing financed under the National Housing Act. In February 1951, the government took further measures to increase the down payments required under the Act.

32 See *Statistical Survey, Financial Supplement*, 1955, p. 59.

33 See the Budget Speech by the Minister of Finance in House of Commons Debates, September 30, 1950, p. 422.

Of course in addition to all of these monetary regulators, general and selective, and fiscal regulators of the flows of funds, there were controls exercised over the use of steel and a few other scarce materials that very directly affected the channelling of funds. Businesses that could not buy steel or all the steel they wanted for their investment projects did not require funds or as many funds to finance their undertakings.

We have mentioned the establishment of a free exchange rate at the first of October in 1950. This did not entail the abolition of all controls over the use of foreign exchange. There were relaxations in these controls, but their total abolition came only at the very end of the period we are discussing, December 31, 1951.[34] Following the freeing of the exchange rate, the discount on the Canadian dollar *vis-a-vis* the United States dollar was reduced from 10 percent to approximately 5 1/3 percent in October 1950. It rose to as high as almost 7 percent in June of 1951 but at the end of the year was approximately 2½ percent, reflecting principally the changes in the current account deficit with the United States.

c. Concluding observations

In the second post-war triennium, period II of our account, Canadians enjoyed full employment. They enjoyed growth of output, even apart from that increased portion of it that was diverted to defence expenditures. The objectives of maintaining employment and increasing the flow of output could be said to have been well served. The objective of containing inflation was not so well served. Commodity prices rose by very substantial amounts especially in 1950 and the first half of 1951. However, the central banking authorities did not approach their tasks with so inflexible a policy as in the first period. The word to describe their action in dealing with the exchange "flood" of 1950 is "resolute". Though looking back one may wonder whether judgments as to timing of certain other moves, such as the imposition of the ceiling on bank loans and non-government investments, were entirely happy, we are likely always to have such *ex post* reflections, for as the Bank remarked in its *Annual Report* for 1956:

> "No one, particularly in the early stages of a boom, can choose some particular moment at which to decide that inflationary dangers are present without doubt and in dangerous degree . . . The question at issue is always one of degree and of the probable continuation as well as direction of discernible trends". (p. 23)[35]

But if the Bank's policy was more flexible and imaginative, we must register our doubts as to whether sufficient use was made of monetary controls in association with government debt policy. Surpluses there were

34 During 1949 and 1950 there was a series of relaxations of the exchange conservation restrictions imposed in November 1947, the very last restriction was removed December 31, 1950.

35 One should never forget that it is quite a different thing to look at the completed record when one can see that the indexes *did* continue to go up than it is to study the record as it emerges; even the record on which decisions must inevitably be based is partial, tentative, and never up-to-date.

indeed, and these derived from heavy taxation, which in turn restricted the buying power of the taxpayer or those to whom they might have transferred their saving, but the disposition of these surpluses to a very considerable extent served to transfer deposits back to the public and to enhance its command over goods. While this was helpful in 1949 it restrained the rate of increase of interest rates in the latter part of 1950 and early 1951.

The return to the free exchange market and to a more flexible policy with respect to interest rates must be recorded as moves toward the objective of allowing economic decisions to be recorded in the market place. The period also saw extensive use of direct controls and incentives, such as the plan of deferred depreciation, and controls over consumer credit and bank loans. We shall defer debate on these controls.

4. 1952-54 Growth followed by mild recession

Period III (as we shall refer to the period 1952-54) of the post-war years, brought growth for two years in real output at the rate of 8 percent in the first year and 4 percent in the second year, and then a minor recession in which real output fell, in round numbers by 3 percent. The gain in real output over the three years is estimated to have been some 9 percent. The decline in wholesale prices which set in after the middle of 1951 continued through most of 1952. These prices remained fairly steady from October 1952 to October 1953 and then fell gently throughout 1954. Consumer prices remained rather steady throughout the period, though they showed some strength, reflecting the relative strength of consumer demand in 1954. Interest rates increased until the last quarter of 1953 with short-term rates rising substantially more than long-term rates. The subsequent decline in long-term bond yields was at first more rapid than in short-term yields, but the decline in short rates accelerated later and lasted longer, so that the spread widened once again. The Canadian dollar went to a premium over the United States dollar in the first quarter of 1952 and remained at a premium throughout the period.

Transactions in the federal debt were of importance during the period, and in 1954 debt management policy seemed to be particularly appropriate. Though in 1952 we had a current account surplus with the rest of the world, we developed deficits again in 1953 and 1954 and the inflow of United States capital achieved very large proportions, by the standards of earlier post-war years.

a. Economic activity and its financing — a review of the aggregates.

If in the post-war years Period I was essentially a period of great capital investment, and Period II was a period of heavy increases in government expenditure superimposed on a continuing if somewhat diminished boom in investment, Period III must be characterized as the great period

of residential construction and consumer expenditure. Residential construction expenditure though up only 1 percent in real terms in 1952 surged forward over 20 percent in 1953 and another 5 percent in the year of recession 1954. Its 30 percent gain in real terms and 37 percent gain in current prices over the full period outstripped the gains in any of the other broad categories of expenditure. The real gain in consumer expenditures in Period III exceeded that experienced in Periods I and II and was substantial in each year of the third period amounting to 2 percent even in the year of recession. Expenditure on durables and services, in current dollars, rose 20 percent and 32 percent respectively over the period and while purchases of durables declined in 1954 there was a very much larger increase in other consumer expenditures in that year.

Government expenditure on goods and services though showing a very great gain in 1952, equivalent in real terms to the 25 percent gain of 1951, remained steady in 1953 and declined some 3 percent in 1954. Investment expenditures (apart from inventories) were up 13 percent over the period and were down 5 percent in 1954 as compared with 1953. Changes in business inventories were fairly large in some years. After the enormous build-up in 1951 business inventories declined somewhat in 1952, and declined by $130 million in 1954. Non-residential construction and machinery and equipment expenditures each rose by smaller percentages in the third period than in either of the first two periods and each declined, both in real terms and in current value terms in 1954.

Exports, though up slightly more in real terms in this period than in the last, grew substantially less in current value terms. Imports rose somewhat less in real terms than over the years 1949 to 1951. In real terms imports grew more rapidly than exports over the period and in current value terms declined slightly while exports rose slightly. We shared the 1954 recession with the United States, and both exports and imports declined a bit less than 5 percent in current values in that year. The details of these percentage changes in categories of gross national expenditure are shown in Table 4.16.

Study of the Tables 4.11 and 4.17 of the balances of saving over investment by sectors shows that (apart from sectors V - VII, financial business) the signs of the balances for each sector in each year of Period III are much the same as in Period II. Consumers had surpluses throughout Period III as they did throughout Period II. The federal government had a deficit in only one of the six years (1954) as did the provincial governments (1949). The rest of the world had a surplus in the last two years of each triennium. Municipal governments had deficits throughout each period. Business also had deficits in all years except 1952. There were however, some differences in the magnitudes of the deficits and the surpluses. Consumer saving, in very round numbers was about $500 million

Table 4.16

PERCENTAGE CHANGES IN GROSS NATIONAL EXPENDITURE AND ITS MAIN COMPONENTS, 1952-54

Categories of Expenditure	1952 over 1951		1953 over 1952		1954 over 1953		1954 over ,951	
	Constant dollars	Current dollars	Constant dollars	Current dollars	Constant dollars	Current dollars	Constant dollars	Current dollars
Gross national expenditure	8	13	4	4	— 3	— 1	9	17
Personal expenditure on consumer goods and services	7	10	6	5	2	4	16	20
Government expenditure on goods and services	25	31	0	4	— 3	1	22	36
Business gross fixed capital formation	9	12	9	12	— 5	— 4	13	21
New residential construction	1	4	23	25	5	5	30	37
New non-residential construction	15	23	6	10	— 3	— 3	18	32
New machinery and equipment	8	9	6	8	—12	—11	0	5
Exports	11	10	— 1	— 3	— 4	— 5	5	1
Imports	4	— 4	8	8	— 5	— 5	7	— 1

Table 4.17

BALANCES OF SAVING OVER INVESTMENT, 1952-54

(millions of dollars)

Sectors	1952	1953	1954
I Consumers	1,291	1,312	809
II Unincorporated business	—1,073	—1,177	—828
III Non-financial corporations	131	—165	—68
IV Government enterprises	—457	—622	—383
II-IV Non-financial business	—1,399	—1,964	—1,143
V Banking	27	45	14
VI Life insurance	—2	—3	—8
VII Other finance	3	—8	32
V-VII Financial business	28	34	38
VIII Federal government	253	142	—100
IX Provincial governments	143	203	155
X Municipal governments	—143	—170	—186
VIII-X Government	253	175	—131
XI Rest of the world	—173	443	427

higher in Period III than in Period II. [36] The over-all federal government surplus on the other hand was about $1.8 billion lower. The deficits of the non-financial business sector were some $1,093 million lower. The deficit of non-financial corporations was substantially lower, some $1,784 million, while the deficit of government enterprises was half a billion dollars higher. The surplus of provincial governments was some $360 million higher while the deficit of municipal governments was roughly $165 million lower. The over-all surplus of the rest of the world was only slightly higher, some $11 million.

Thus, to summarize the changes in the balances of saving over investment by sectors, we may observe that the pattern of surpluses and deficits remained the same but that consumer saving grew a very considerable amount, the federal government surplus was diminished to the point of becoming a deficit in 1954, the deficit of business declined sharply while that of municipal governments continued its steady post-war climb. The total of the surpluses of the surplus sectors in 1954 was about one-half of the comparable figures for 1951.

Let us turn now to Tables 4.18, 4.19 and 4.20 in which abbreviated transactions accounts for the years 1952-54 are shown.

Consumers, with considerably larger savings in Period III, increased their investments in deposits, mortgages and government bonds. Their increase in deposits in 1952, $660 million was twice the increase in 1951, and though the increase in 1953 was only $250 million, it was over $920

36 The figure for 1954 like the figure for 1950 to which we drew attention earlier, is under some suspicion inasmuch as the residual credits in the consumer account are especially high in this year. We simply do not know how the residual should be allocated throughout the accounts for the consumer sector.

Table 4.18

ABBREVIATED NATIONAL TRANSACTIONS ACCOUNTS

1952

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
I Transactions Recorded in the National Accounts												
Services of factors of production	356	16,384	14,793	—	—	—	2,120	617	145	413	17,414	17,414
Transfers	1,698	1,386	4,183	—	—	—	1,955	6,450	—	—	7,836	7,836
Goods and services, n.e.i. (net)	14,425	—	—	—	—	22,568	1,632	—	5,428	4,987	21,485	27,555
Saving	1,291	—	3,592	—	—	—	1,360	—	—173	—	6,070	—
Investment	—	—	4,963	—	—	—	1,107	—	0	—	6,070	—
Saving — Investment	1,291	—	—1,371	—	—	—	253	—	—173	—	—	—
Total (ex. Saving)	17,770	17,770	22,568	—	—	22,568	7,067	7,067	5,400	5,400	52,805	52,805
II Transactions Not Recorded in the National Accounts												
Saving — Investment (carried)	—	1,291	—	—1,399	—	28	—	253	—	—173	—	0
Currency and deposits: Domestic	658	—	51	—	31	557	—105	6	—72	—	563	563
Other (incl. gold and foreign deposits)	—	—	97	—	—82	—83	—21	—	—1	77	—6	—6
Instalment credit and charge accounts	—	332	145	39	227	—	—	—	—	—	372	372
Loans: Bank	—	76	—	119	349	139	—	15	—	—	349	349
Other	—	56	3	58	68	—1	—35	—4	22	—51	58	58
Mortgages	198	—	4	479	276	—	1	—	—	—	479	479
Bonds and Stocks: G. of C. bonds	123	—	—187	—	6	—	92	—139	—173	—	—139	—139
Other bonds and stocks	211	—	194	812	361	74	112	229	322	85	1,200	1,200
Insurance and pensions	351	—	—	2	—	288	—	61	—	—	351	351
Claims on associated enterprises	602	—	635	1,755	17	202	447	2	346	88	2,047	2,047
Other transactions and errors	184	571	559	—365	39	88	68	137	85	504	935	935
Total	2,326	2,326	1,500	1,500	1,293	1,293	560	560	530	530	6,209	6,209

Table 4.19

ABBREVIATED NATIONAL TRANSACTIONS ACCOUNTS

1953

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
I Transactions Recorded in the National Accounts												
Services of factors of production....	396	17,257	15,441	—	—	—	2,310	651	165	404	18,312	18,312
Transfers........	1,842	1,489	4,213	—	—	—	2,130	6,696	—	—	8,185	8,185
Goods and services, n.e.i. (net).....	15,196	—	—	—	—	23,305	1,777	—	5,235	5,439	22,208	28,744
Saving........	1,312	—	3,651	—	—	—	1,130	—	443	—	6,536	—
Investment........	—	—	5,581	—	—	—	955	—	0	—	6,536	—
Saving — Investment........	1,312	—	—1,930	—	—	—	175	—	443	—	0	—
Total (ex. Saving)........	18,746	18,746	23,305	—	—	23,305	7,347	7,347	5,843	5,843	55,241	55,241
II Transactions Not Recorded in the National Accounts												
Saving — Investment (carried).....	—	1,312	—	—1,964	—	34	—	175	—	443	—	0
Currency and deposits: Domestic...	246	—	—36	—	—19	635	469	8	—17	—	643	643
Other (incl. gold and foreign deposits)........	—	—	69	—	56	9	20	—	22	157	166	166
Instalment credit and charge accounts	—	215	73	19	161	—	—	—	—	—	234	234
Loans: Bank........	—	113	—	496	627	32	—	—14	—	—	627	627
Other........	—	62	—	25	83	—	—44	48	20	—76	59	59
Mortgages........	256	—	2	626	365	—	3	—	—	—	626	626
Bonds and Stocks: G. of C. bonds..	297	—	—5	—	—10	—	272	426	—128	—	426	426
Other bonds and stocks........	263	—	200	570	84	174	53	303	303	—144	903	903
Insurance and pensions........	378	—	—	—2	—	317	—	63	—	—	378	378
Claims on associated enterprises....	508	—	348	1,573	26	101	447	3	426	78	1,755	1,755
Other transactions and errors......	147	394	664	—30	40	111	—61	147	91	259	881	881
Total........	2,095	2,095	1,314	1,314	1,412	1,412	1,159	1,159	717	717	6,698	6,698

Table 4.20

ABBREVIATED NATIONAL TRANSACTIONS ACCOUNTS

1954

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
I Transactions Recorded in the National Accounts												
Services of factors of production....	433	17,183	15,132	—	—	—	2,581	687	147	423	18,293	18,293
Transfers....................	1,859	1,660	4,113	—	—	—	2,338	6,650	—	—	8,310	8,310
Goods and services, n.e.i. (net).....	15,742	—	—	—	—	22,789	1,610	—	5,000	5,151	22,352	27,940
Saving....................	809	—	3,544	—	—	—	808	—	427	—	5,588	—
Investment....................	0	—	4,649	—	—	—	939	—	0	—	5,588	—
Saving — Investment............	809	—	—1,105	—	—	—	—131	—	427	—	0	—
Total (ex. Saving).............	18,843	18,843	22,789	—	—	22,789	7,337	7,337	5,574	5,574	54,543	54,543
II Transactions Not Recorded in the National Accounts												
Saving — Investment (carried).....	—	809	—	—1,143	—	38	—	—131	—	427	—	0
Currency and deposits: Domestic...	921	—	104	—	—66	752	—234	2	29	—	754	754
Other (incl. gold and foreign deposits)................	—	—	76	—	76	41	8	—	37	156	196	196
Instalment credit and charge accounts	—	37	62	—20	—45	—	—	—	—	—	17	17
Loans: Bank..................	—	16	—	89	61	—53	—	7	—	2	61	61
Other..................	—	82	1	22	87	1	—17	23	—	—57	71	71
Mortgages....................	436	—	8	932	477	—	11	—	—	—	932	932
Bonds and Stocks: G. of C. bonds..	—202	—	—4	388	306	—	—175	—573	—110	—	—185	—185
Other bonds and stocks.........	—12	—	197	678	538	76	102	338	320	53	1,145	1,145
Insurance and pensions..........	416	—	—	—	—	354	—	62	—	—	416	416
Claims on associated enterprises....	85	—	363	671	36	217	127	2	392	113	1,003	1,003
Other transactions and errors......	103	804	700	—110	22	66	6	96	89	64	920	920
Total......................	1,748	1,748	1,507	1,507	1,492	1,492	—174	—174	757	757	5,330	5,330

million in 1954 when there was a considerable reduction in the sector's holdings of federal government bonds and a very much reduced investment in unincorporated enterprise. Investment by the consumer sector in mortgages was very much higher in Period III than in the previous post-war years, and was especially heavy in 1954, amounting in that year to nearly $440 million. Investment in insurance and pensions continued its steady post-war climb and amounted to $1.1 billion over the years 1952 to 1954. Investment in unincorporated enterprise declined in 1952 to $602 million from $541 million in 1951; it declined in 1953 to $508 million and fell to $85 million in the year of recession, 1954. Investment in non-federal bonds and stocks, which averaged $240 million in 1952 and 1953, was negative to the extent of over $10 million in 1954. Consumers accumulated government bonds during the first two years of the period under review but reduced their portfolio by $200 million in 1954, so that the increase in their holdings over the three years was approximately $220 million. There were very large redemptions of three different issues of Victory Loans in 1954. The supply of funds to consumers through instalment credit and charge accounts increased over $330 million in 1952 after the relaxation of credit controls in May; the increase in 1953 was less, and in 1954 was under $40 million. Through instalment credit, charge accounts and other loans, consumers were supplied with about $990 million over the period 1952 to 1954.

The deficits of the non-financial business sector were, as we have noted, substantially smaller in Period III than in Period II of the post-war years. This was not true however of government enterprises, and indeed there was very substantial borrowing by the federal enterprises through guaranteed bonds in 1954. The amount was some $390 million. Other transactions in government bonds by the non-financial business sector did not amount to anything in the rest of the period except that in 1952 when there were limits on the increase in bank loans, until May, non-financial corporations reduced their holdings of government bonds by some $190 million. In 1953 banks loans to non-financial business increased by just under $500 million; about $350 million of this went to non-financial corporations, $120 million went to unincorporated business and the rest to government enterprises. In 1954 slackness of business, and the running down of inventories resulted in a very small increase in bank loans of some $90 million, which was divided $40 million, $30 million, $20 million, roughly, among non-financial corporations, government enterprises and unincorporated business respectively. Rather more money was raised by non-financial business through transactions in stocks and non-federal bonds in Period III than in Period II. Non-financial corporations raised $720 million through transactions in non-federal bonds in Period II; in Period III the corresponding figure was $1,060 million. These corporations raised $370 million through stocks in Period II; in Period III the figure was $540 million. Non-financial business borrowed $2,040 million through mortgages

in Period III, nearly $550 million more than in the previous three years, and of this total borrowing some 83 percent accrued to unincorporated business, the sector in which we include the business of home-owning. Non-financial corporations drew larger amounts in this third period from non-residents through the channel of direct investment than in earlier post-war years. The channels through which each sector in the non-financial business group supplied funds to other sectors include currency and deposits which increased $320 million in Period III, instalment credit and charge accounts, receivables and payables, transactions in existing real assets, but information for these latter two categories is, we repeat, incomplete.

The federal government reduced its debt by $140 million in 1952, and in addition the government accounts increased their holdings of federal debt by $80 million. Investment in government institutions increased by $250 million but deposits were drawn down by $157 million. In 1953 debt was increased by some $425 million but the government accounts took up $210 million. Investment in government institutions increased $150 million and deposits were built up by over $520 million. In 1954, the year of the deficit of $100 million, debt was reduced by nearly $573 million (this is direct debt)[37] while government units sold nearly $120 million. There were disinvestments in associated companies, and deposits were drawn down by nearly $270 million. Throughout the period the government received funds through the repayment of loans and through insurance and pension contracts. It is significant that in the year of recession in the economy, the government ran a deficit, drew down its deposits, and ran down its own debt. It is true that government enterprises borrowed heavily and that the government accounts sold securities, but on balance the net effect though perhaps relatively small would seem to have been in the direction warranted by the circumstances. If the government had followed the policy in recession which was the direct opposite of its debt management policy during the prior post-war inflations, it would have indeed run a deficit but would have sold securities on balance. But in 1954 both consumers and non-financial corporations succeeded in reducing their holdings of government debt by $600 million which would seem to have been wholly salutary even if partly the fortuitous result of the structure of the debt by maturities.

The rest of the world ran a deficit with Canada in 1952, but a surplus in the next two years. This sector was a net seller of Government of Canada securities in each year of Period III but consistently bought other bonds and stocks including the bonds of Canadian provinces and municipalities. Non-residents purchased provincial government bonds in the amount of $190 million, municipal bonds in the amount of $102 million and stocks in the amount of almost $295 million during the years 1952 to 1954.

37 We have already noted that in this year government enterprises increased their debt by $388 million.

Direct investment in Canadian enterprise was very heavy in these years amounting to $1,164 million.

The life insurance companies, with an average annual intake from the consumer sector through contractual saving of $300 million, concentrated their investment activity on mortgages during the third post-war period. Their investment in mortgages rose by nearly $580 million over the three years, some $90 million more than over the previous three years. Their sales of federal bonds were lower over the whole period, but were very much higher in 1954 than in the previous two years. The companies showed rather more interest in provincial bonds and rather less in municipal and "other" bonds in Period III. Investment in stocks increased $34 million in Period III.

The chartered banks increased their Canadian deposit liabilities in each of the years 1952-54 by $240 million, $475 million and $510 million respectively. There were substantial increases in loans in 1952 and 1953 amounting to $350 million and $625 million respectively, but the increase in loans in 1954 was less than one-tenth of the increase in 1953. Recession was reflected in the banks' portfolios by a very sharp slowing down of the rate of increase of loans and a very large increase in investment in federal bonds. The banks increased their federal bond holdings by $512 million in 1954 which was the largest annual increment in the entire post-war period. Of course a very important feature of the 1954 changes in the portfolios of the banks was the emergence of investment in National Housing Act mortgages following the revision of the Bank Act in that year. Banks invested just under $75 million in mortgages in 1954.

In general, the flows of funds in Period III reflected on the one hand the decline in the importance of government expenditure on goods and services, and non-residential investment expenditures (which, collectively, fell in 1954) and on the other hand the considerable increase in expenditures on residential housing, which continued to increase during the 1954 recession. The over-all reduction in federal debt, direct and guaranteed, was small by comparison with previous post-war years, but, as we have remarked, the management of the debt conformed rather more closely to the requirements of the economic situation than in the previous post-war periods. Non-financial business, though making smaller over-all net demands on other sectors, drew particularly heavily on non-residents during this period. Let us now turn once again to the regulators of the flows of funds.

b. The regulators of the flows of funds

Let us, as usual, consider first monetary policy and government debt policy. In general, it may be said that during 1952 and 1953, the monetary authorities contrived to permit some expansion of the cash reserves of the chartered banks, but not more than was consistent with the need for

larger bank deposits and more bank notes occasioned by the growth in output. As we have seen there was a downward drift of prices in this period. The theoretical yield on 15-year government bonds drifted upwards until the last quarter of 1953, rising from 3.54 percent at January 15, 1952 to 3.75 percent at September 30, 1953. On 2-year government bonds the yield rose much more sharply, rising from 2.33 percent at January 15, 1952 to 3.38 percent at September 30, 1953. The weighted average of tender rates on 3-month treasury bills rose even more pronouncedly, from .89 percent at the end of January 1952 to 1.97 percent at the end of September 1953. Yields on government securities generally started to fall during the last quarter of 1953. This rise in yields, especially short-term yields, indicates selling pressure in the markets for government securities, especially of the short-term variety. There were periods during both 1952 and 1953 when the banks reduced their holdings of government securities, especially of shorter term in order to increase their loans. On a daily average basis the cash reserve ratio of the banks was 10.6 percent in the first half of 1952 as it had been in the last half of 1951, but was 10.2 percent in the second half of 1952 and averaged just slightly over this in 1953.

In the last quarter of 1953 the Bank of Canada became a net buyer of government securities, and the cash reserves of the chartered banks on a daily average basis were some $18 million higher in December than they were in the month of September. Throughout 1954, the banks were in a fairly easy cash position as is attested by a number of facts but especially the build-up of their portfolio of government securities by over $510 million. Yields on government securities dropped sharply during the recession, reflecting the policy of easier money. The yield on the 15-year theoretical bond dropped from 3.75 percent at September 30, 1953 to 3.06 percent on March 31, 1954. It remained fairly steady throughout the balance of the year. The yield on the 2-year bond fell from 3.38 percent at September 30, 1953 to 2.23 percent at March 31, 1954 and further to 1.89 percent by December 31, 1954. The spread in yields between short and long-term issues thus widened again.

Monetary policy, and debt management were in accord with the needs of the times during this third post-war triennium. There were changes in banking legislation and in the organization of the short-term market for government securities during this period which are of very considerable relevance to the general subject of this volume. However, as they are, for the most part technical and detailed, we prefer to describe and discuss them in Chapter 8 below rather than in connection with the general review given in this chapter.

On the whole, the changes in fiscal policy, made in the successive budgets of Period III, were consistent with the attaining of the broad objectives of encouraging growth and maintaining high employment without

inflation. The changes in the personal income tax as a percentage of income are indicated for selected classes of taxpayers and selected incomes in Table 4.21. The rates, increased slightly in 1952, were lowered again by very modest amounts in 1953 and 1954.[38]

Table 4.21

PERSONAL INCOME TAXES AS A PERCENTAGE OF INCOME

	Income			
	$1,500	$3,000	$5,000	$10,000
Single, no dependents				
1951	5.5	11.7	15.4	21.6
1952	6.2	13.1	17.0	23.3
1953	6.0	12.7	16.2	21.6
1954	5.7	12.0	15.2	20.2
Married, two children				
1951	0	3.9	10.0	17.4
1952	0	4.3	11.1	18.8
1953	0	4.2	10.8	17.6
1954	0	4.0	10.1	16.4

NOTE: The above figures show the actual tax liability of a taxpayer with children who receives family allowance, but average family allowances have *not* been deducted from tax paid. It is assumed that all incomes are entirely earned incomes. The old age security tax (1952: 1 percent of taxable income with maximum of $30; 1953, 1954: 2 percent of taxable income with maximum of $60) has been included in the tax liability

The tax on corporate incomes was raised in the 1952 budget from 15 percent to 20 percent on the first $10,000 of taxable income and from an effective 45.6 percent on profits over $10,000 to 50 percent.[39] In addition an old age security tax of 2 percent of taxable income became payable by corporations. In 1953 the 20 percent rate was reduced to 18 percent, the 50 percent rate was reduced to 47 percent and the category of taxable income to which the lower of the two rates was to be applied was doubled from $10,000 to $20,000, explicitly as a further move in support of small business. The 2 percent old age security tax continued to apply. There were no changes in 1954 save that the provision in the income tax regulations which limits the deductions for capital costs to the amount taken on the taxpayer's books of account was withdrawn. Accordingly, corporations were permitted to show profits of different amounts in their reports to shareholders than in their returns to the income tax authorities.[40]

There were considerable reductions in indirect taxes over Period III especially in 1952 and 1954 and particularly on consumers' durables.

38 It may be recorded here that the privilege of deducting a percentage of dividends from Canadian corporations from the tax liability of persons was increased in 1953 by changing the percentage from 10 percent to 20 percent

39 Special provisions were made for corporations in Ontario and Quebec where provincial corporation income taxes continued to be imposed.

40 It should be recorded that the deferred depreciation regulations were terminated in November 1952 on all properties acquired after December 31, 1952.

The consumer credit restrictions that had been imposed in November 1950 and tightened in March 1951 were relaxed in January 1952 and withdrawn in May 1952.

The United States dollar remained at a discount in Canada throughout Period III. The Canadian dollar strengthened very considerably in the first three quarters of 1952; while for the first seven months of 1952 the difference between long-term bond yields between Canada and the United States increased. [41] The difference in bond yields reached its maximum in July 1952 and then declined through May of 1953. The United States dollar strengthened in Canada, albeit hesitatingly from September 1952 through June of 1953. As the difference in bond yields again increased in the last half of 1953 and through January 1954, with the fall in yields in both countries, the Canadian dollar strengthened again, reaching its highest quotation in this swing in February 1954. A sharp drop in the difference in yields in February, March, April and May of 1954 was reflected in a weakening of the Canadian dollar again. The levelling out of the decline in bond yields and subsequent upturn in both countries in the balance of 1954 was accompanied by a decline in the price of the United States dollar in Canada in June, July, August and September and the stability of the quotations in the last quarter of the year, in spite of continuing moderate decline in the differences in yields. This fairly close relation between the differences in bond yields and the rate of exchange, is of course a reflection of the sensitivity of borrowers and lenders in Canada and the United States to differences in yields after allowance for the effect and likely effect of the exchange rate on the cost of money or securities. The matter has been expressed rather succinctly as follows:

> " . . . . A rising value of the Canadian dollar reduces the incentive for Canadians to borrow in the United States or for Americans to buy Canadian bonds, and therefore tends to widen the spread between Canadian and U.S. interest rates. On the other hand, a widening of the spread between interest rates in the two countries may encourage the movement of capital from the United States to Canada, and therefore tend to strengthen the Canadian dollar".[42]

Throughout this period, the exchange authorities continued their policy, adopted after the freeing of the rate in October 1950, of "helping to maintain orderly conditions without preventing basic supply and demand factors from determining the level of the rate".[43] It should be remarked however, that differences in government bond yields in Canada and the United States were not always in the same direction, nor, when in the

[41] Long-term bond yields are normally higher in Canada than in the U.S. but they fell in each of the first 5 months of 1952 in the U.S., and then started to rise slowly, while in Canada, yields on the 15-year theoretical government bond rose somewhat over the first four months, dropped slightly in May and then rose fairly rapidly for the next four months.

[42] *Monthly Review,* The Bank of Nova Scotia, Toronto, February-March, 1954.

[43] Foreign Exchange Control Board, *Annual Report to Minister of Finance for the Year 1951,* Ottawa, p. 19.

same direction, of the same degree. The central bank as one of the traders in the government bond market, had an influence on government bond yields and through them on other yields and thus indirectly on the rate of exchange.

c. Concluding observations

In the third triennium of the post-war period, Canadians for most of two years enjoyed high and rising income and employment, but in the last fifteen months or so experienced a considerable rise in unemployment. Expenditures on social capital, especially housing, were well maintained. Indeed, as we saw, housing was one of the strong categories of demand in the last two years.

Both monetary and debt policy were appropriate through this period, and interest rates and exchange rates were given a substantial measure of freedom to assist in the adjusting of effective demand and supply.

5. 1955 and 1956: Growth with rising prices

In Period IV of our survey of post-war years, real output increased by an average of a little more than 8 percent in each year which was higher than in any previous post-war year, and probably higher than could be maintained indefinitely. This performance was not adequate to prevent pressure in the goods markets and the capital markets however. Prices rose by a little less than 6 percent at the wholesale level and slightly less than 3.5 percent at the retail level from January 1955 to December 1956.

This third post-war inflation differed from the earlier two in several respects, but we should like to emphasize in particular the relative changes in interest rates and prices in the three waves of inflation.[44] In the first wave, as we have seen, prices rose very substantially, but not until prices had been rising for two years (to consider January 1946 as the start of our story) was any adjustment allowed in government bond yields and these adjustments were comparatively slight and took place mainly in the long-term market. In the second wave of inflation, ending in mid-1951, interest rates were allowed to rise substantially and the pressures of inflation were shared much more evenly between the capital markets and the goods markets. Between September 1949 and July 1951 wholesale prices and consumer prices rose by about 25 percent and 14 percent respectively. Over this period the yield on the 15-year theoretical government bond rose by 16 percent while the average rate at tender for 3-month treasury bills rose over 50 percent. During the third wave of inflation the percentage rises in yields in both the long and short bond markets far outstripped the rises in prices at either the wholesale or retail level. For example between January 1955 and December 1956 the tender rate on treasury bills rose almost 250 percent (248.5 percent)

[44] See Chart 4.5 at the end of Chapter 4.

and the theoretical yield on 15-year government bonds rose 28.5 percent. Wholesale prices, which in this period rose rather more than consumer prices, advanced less than 6 percent as we have remarked. In such comparisons as these, some may wish to take slightly different intervals for the calculation of relative changes, but the ones we have selected fairly illustrate our broad generalization that the brunt of the first post-war inflation was reflected in the goods market, the impact of the second was shared much more evenly between the goods and capital markets, while the third had its main reflection in the capital markets. This generalization in turn reflects many circumstances and developments not all confined to experience within Canada but in particular it reflects the growing willingness of the monetary authorities over the post-war years to use the powers at their command. In 1955 and 1956, the Bank of Canada exercised increasingly stringent control and achieved what must be counted considerable success in restraining the demands for finance in the economy.

a. Economic activity and its financing — a review of the aggregates

The last two of the eleven post-war years here under review were like the first three in that they were dominated by the growth of investment expenditures. In 1955 real expenditures on residential construction advanced some 10 percent; real expenditures on non-residential construction rose 7 percent and those on machinery and equipment rose 4 percent. The gains as measured in current prices were somewhat higher. In 1956 investment expenditures also dominated the picture but by virtue of the fact that an almost complete levelling out of expenditure on housing was offset by gains of 30 percent and 21 percent respectively in real expenditures on non-residential construction and machinery and equipment. Consumer expenditures on goods and services in current values grew by 8 percent in each year; government expenditure in current dollars rose by 7 percent and 10 percent respectively in 1955 and 1956. Exports advanced 7 percent in real terms in each year, and 12 percent and 10 percent in current values in 1955 and 1956 respectively. Imports increased rather more rapidly, 13 percent and 16 percent in real terms and 16 percent and 19 percent in current values in 1955 and 1956 respectively. These divergent rates of increase in current values of exports and imports were reflected in the growth of our current account deficit in the balance of payments with other countries especially the United States. The total of expenditure, gross national expenditure, increased by 9 percent in 1955 and by 11 percent in 1956. The details of these percentage changes in gross national expenditure and its main components are shown in Table 4.22.

We do not have full transactions accounts for the years 1955 and 1956. The transactions that are recorded in the national accounts are shown in abbreviated form in Table 4.23. The estimates of the balances of saving over investment that we have for the main sectors are shown separately in Table 4.24. The sectors with deficits were business and municipal

Table 4.22

PERCENTAGE CHANGES IN GROSS NATIONAL EXPENDITURE AND ITS MAIN COMPONENTS—1955 AND 1956

Categories of Expenditure	1955 over 1954		1956 over 1955	
	Constant dollars	Current dollars	Constant dollars	Current dollars
Gross national expenditure	9	9	7	11
Personal expenditure on consumer goods and services	8	8	5	7
Government expenditure on goods and services	4	7	4	10
Business gross fixed capital formation	7	9	20	27
New residential construction	10	12	7	11
New non-residential construction	7	11	30	38
New machinery and equipment	4	5	21	29
Exports	7	12	7	10
Imports	13	16	16	19

governments, sectors which typically had deficits throughout the post-war period. Consumer saving in 1955 was substantially higher than in 1954, but not nearly so high as in the previous three years. Consumers increased their saving in 1956 by some $680 million, to $1,540 million, and thus, according to our estimates, established a new post-war peak. The business deficit in 1955, over half a billion dollars higher than the deficit in 1954 was some $200 million higher than the average of the deficits for this sector over the previous post-war years. The increase of the business deficit by $1,648 million in 1956 was one of the outstanding changes in the sector deficits in Period IV. This increase in the deficit was about $200 million more than the increase in fixed investment expenditures in the economy.

The federal government ran a surplus in both 1955 and 1956; at $595 million the 1956 surplus was of substantial proportions and over $400 million larger than in 1955. The surplus of the provincial governments was smaller in each of the last two of the post-war years under review than in the years 1952 to 1954 and the surplus for 1956 was the smallest in any post-war year with the exception of 1949. The deficits of the municipal governments continued to mount.

The surplus of the rest of the world in 1955 was larger than in any earlier post-war year and probably larger than in any previous year. In 1956 the surplus of the rest of the world was twice as large as in 1955! In 1956 Canada's deficit in the current account of the balance of international payments was not much less than the total of saving in the consumer sector of the economy and her deficit with the United States was over $100 million larger than consumer saving.

Though we cannot account for the disposition of surpluses and deficits as completely as for earlier years, we can indicate some of the changes in the

Table 4.23

NATIONAL TRANSACTIONS RECORDED IN THE NATIONAL ACCOUNTS, 1955 AND 1956

1955

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
1. Services of factors of production	447	18,510	16,385	—	—	—	2,743	742	160	483	19,735	19,735
2. Transfers	1,940	1,759	4,613	—	—	—	2,529	7,323	—	—	9,082	9,082
3. Goods and services, n.e.i. (net)	17,017	—	—	—	—	24,859	1,668	—	5,604	5,960	24,289	30,819
4. Saving	865	—	3,861	—	—	—	1,125	—	679	—	6,530	—
5. Investment	0	—	5,491	—	—	—	1,039[a]	—	0	—	6,530	—
6. Saving — Investment	865	—	—1,630	—	—	—	86	—	679	—	0	—
Total (excl. 4)	20,269	20,269	24,859	—	—	24,859	8,065	8,065	6,443	6,443	59,636	59,636

1956

	Consumers		Business				Government		Rest of the World		Total	
			Non-financial		Financial							
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
1. Services of factors of production	474	20,653	18,392	—	—	—	2,996	819	140	530	22,002	22,002
2. Transfers	2,210	1,795	5,129	—	—	—	2,067	8,151	—	—	9,946	9,946
3. Goods and services, n.e.i. (net)	18,223	—	—	—	—	27,687	1,726	—	6,199	7,167	26,148	34,854
4. Saving	1,541	—	4,166	—	—	—	1,641	—	1,358	—	8,706	—
5. Investment	0	—	7,444	—	—	—	1,262[a]	—	0	—	8,706	—
6. Saving — Investment	1,541	—	—3,278	—	—	—	379	—	1,358	—	0	—
Total (excl. 4)	22,448	22,448	27,687	—	—	27,687	8,970	8,970	7,697	7,697	66,802	66,802

a Excludes investment in inventories.

Table 4.24

BALANCES OF SAVING OVER INVESTMENT, 1955 AND 1956

(millions of dollars)

	Sectors	1955	1956
I	Consumers	865	1,541
II-VII	Business[a]	—1,630	—3,278
VIII	Federal government[b]	188	595
IX	Provincial governments[b]	114	24
X	Municipal governments[b]	— 216	— 240
VIII-X	Government[b]	86	379
XI	Rest of the World	679	1,358

a Included here are non-financial business and financial business. The estimates for 1955 and 1956 include inventory investment by government.

b These estimates for 1955 and 1956 exclude inventory investment by government which is not separately available for these two years.

financial accounts of the main sectors. We shall first give such information as we have on a few categories of transactions, and then give a resumé of the accounts of the banks, the life companies and the rest of the world.

Bank deposits[45] in Canada increased by some $650 million in 1955, and by approximately $260 million in 1956. Personal saving deposits increased rather more in 1955 than in 1956 the totals being some $415 million and $375 million respectively. Other Canadian deposits held by the "general public"[46] increased by $235 million in 1955 but decreased $120 million in 1956. Government of Canada deposits at the chartered banks and at the Bank of Canada increased by $375 million in 1955 but were drawn down by $320 million in 1956.

Government of Canada debt,[47] direct and guaranteed, increased by $550 million in 1955 but was decreased by $780 million in 1956. Thus, while in 1955 the government built up its deposits and its debt, in 1956 it used deposits as well as its surplus to pay off debt. In 1955, the Bank of Canada, the government accounts and the "general public" were net buyers of government securities. The Bank of Canada increased its holdings by some $150 million, the government accounts bought nearly $290 million and the public bought $370 million. The public's transactions included purchases of treasury bills of $290 million, Canada Savings Bonds of $340 million and sales of other issues of $260 million. The chartered banks sold securities in 1955 to the extent of some $250 million. In 1956, the most arresting figure in the statistics (see Table 4.25) is that for chartered bank sales of Government of Canada securities; the banks sold some $915 million worth of government bonds and bought $315 million worth of treasury bills so that

45 The figures quoted here are differences in year-end totals after deducting total bank items in transit from total deposits and from deposits other than personal saving deposits. The figures have been rounded to the nearest $5 million.

46 The term "general public" as used by the Bank of Canada, excludes the Government of Canada, the Exchange Fund, the Bank of Canada and the chartered banks.

47 The figures we cite are rounded to the nearest $5 million and are taken from the Bank of Canada's *Annual Reports* for 1955 and 1956. Figures for 1956 are in terms of par values and are therefore not directly comparable with those for 1955.

Table 4.25

PURCHASES AND SALES OF GOVERNMENT OF CANADA SECURITIES, 1956
DIRECT AND GUARANTEED

(millions of dollars)

	Purchases				Sales				Net Purchases + or Net Sales—
	Treasury bills	Treasury notes	Canada Savings Bonds	Other issues	Treasury bills	Treasury notes	Canada Savings Bonds	Other issues	
Bank of Canada	243	—	—	267	—	500	—	—	+ 10
Chartered banks	315	—	—	—	—	—	—	913	—598
Government accounts	3	—	—	24	—	—	—	—	+ 27
General public	—	—	108	—	211	—	—	116	—219
Retirements (purchases) or Issues (sales)	—	500	—	738	350	—	108	—	+780[a]
Total	561	500	108	1,029	561	500	108	1,029	0

a Of which: direct debt, 713; guaranteed debt, 67.
SOURCE: Bank of Canada, *Annual Report to the Minister of Finance, 1956*, p. 69.

net sales of government securities for the year totalled $600 million. The banks were joined as net sellers by the public. The public's net increase in Canada Savings Bonds was only $110 million; and they sold other bonds to a slightly greater extent and also sold treasury bills in the amount of $210 million, so that the public's net sales for the year were $220 million. The central bank and the government accounts were not significant net buyers in 1956, buying a net amount of less than $40 million between them. The treasury itself took up the securities and retired them.[48] These transactions in the government debt reveal that once again in post-war Canada, inflationary developments were accompanied by a debt management policy which involved using the cash surplus and indeed some of the cash as well, to retire debt. In this period, as in the second wave of inflation, the bulk of the debt taken up by the government in this way was drawn from the chartered banks. It will be recalled that it was only as far back as the recession of 1954 when a large block of this debt had been acquired by the banks. We shall refer to this matter again a few pages below in our sketch of monetary policy in 1956.

Bank loans in Canada increased more in 1955 than in 1956, the amounts being $795 million and $510 million respectively. We give in Table 4.26 a distribution of the increases and decreases by broad sectors or groups of sectors. It will be seen that bank loans to persons after a very substantial increase in 1955 were at the same level at the end of 1956 as at the end of 1955. Loans to non-financial business increased $10 million more in 1956 than in 1955. Loans to financial business, very high in both years, were slightly lower in 1956 than 1955. Of these financial loans, loans to instalment and other finance companies (including small loan companies) increased by $129 million in 1955 and $98 million in 1956.

We are able to present a category account for instalment credit and charge accounts that is consistent with that given in the transactions accounts for 1946 to 1954. This is shown in Table 4.27. From this table it may be seen that consumers' liabilities in this category increased very substantially both in 1955 and 1956. The increase in 1956 of $211 million was some $120 million less than the increase in 1952, the year of the largest increase in the post-war period in instalment credit and charge accounts of consumers.

Accounts available for the banks are of course as full for Period IV as for the earlier periods. Inasmuch as we have already indicated the main trends in the chartered banks' statements for 1955 and 1956, and will refer to them again in our review of monetary policy in this period our recapitulation at this point may be very brief. In 1955 deposits in Canada rose some $650 million while investments in Government of Canada

[48] The process was a little more complicated than this; for example, the government retired treasury notes in the amount of half a billion dollars held by the Bank of Canada which in turn bought treasury bills and other issues in roughly equal amounts to bring the net change in its portfolio over the year to an increase of $10 million.

Table 4.26

CHANGES IN BANK LOANS[a] OUTSTANDING IN CANADA, 1955 AND 1956

(millions of dollars)

Sectors		1955	1956
I	Consumers	305	—1
II-IV	Non-financial business	310	321
VI-VII	Financial business	136	122
IX	Provincial governments	22	12
X	Municipal governments	21	53
	Total loans in Canada[a]	794	507

a Excludes "day loans".
SOURCE: Bank of Canada, *Annual Report to the Minister of Finance, 1956*, p. 59.

securities declined some $255 million. Investments in mortgages were increased $220 million, in corporate securities $130 million and in junior government securities $100 million. In 1956 deposits in Canada increased by $260 million while Government of Canada securities were drawn down by $915 million. Investments in mortgages were increased by $200 million and in corporate securities by $30 million, while investments in securities of junior governments were reduced by $85 million.

Accounts for the life companies, which for 1946-54 have been derived from reports to the Superintendent of Insurance have not been constructed for the years 1955 to 1956. However, the principal trends in these portfolios for these two years may be deduced from the figures published monthly in the *Statistical Summary* of the Bank of Canada covering the investment transactions of twelve life insurance companies. According to these figures the life companies continued to reduce their holdings of Government of Canada bonds in 1955 and 1956 and invested particularly heavily in mortgages and corporate and "other"[49] bonds. Their reduction in government bond holdings was probably three and a half times as great in 1956 as in 1955 and their increase in investment in corporate and "other" bonds was nearly three and three-quarter times greater in 1956 than in 1955. On the other hand the net increase in investment in mortgages was very little greater in 1956 than in 1955.

Information for the rest of the world account is nearly complete inasmuch as this account, as we have presented it for earlier years, is to a large extent a rearrangement of the balance of payments. We have remarked on the very large current account surplus of the rest of the world with Canada in 1955 amounting to $679 million and have observed that in 1956 this surplus reached the very large figure of $1,358 million. In 1955 direct investment in Canada was $410 million and in 1956 reached its

49 "Other" bonds excludes those of governments in Canada and corporations.

Table 4.27

INSTALMENT CREDIT AND CHARGE ACCOUNTS 1954, 1955 AND 1956

(millions)

	1954	1955	1956
Debit			
Non-financial business[a]	62	63	54
Financial business[b]	—45	135	244
Total	17	198	298
Credit			
Consumers[c]	37	170	211
Non-financial business[d]	—20	28	87
Total	17	198	298

a Residual.

b Increments in total retail balances outstanding of instalment finance companies, Bank of Canada, *Statistical Summary*, May 1957, p. 157.

c Increments in charge accounts and instalment credit in estimates of consumer credit outstanding, Bank of Canada, *Statistical Summary*, March 1957, p. 89.

d Increments in balances outstanding of instalment finance companies with respect to commercial and industrial goods, Bank of Canada, *Statistical Summary*, May 1957, p. 157.

largest post-war figure of $525 million. Canadian direct investment abroad at $100 million in 1956 was also higher than in any other post-war year however. In 1955, retirements exceeded new issues abroad of stocks and bonds by nearly $20 million, but in 1956 net new issues of stocks and bonds abroad totalled over $540 million, also a post-war record. The detail of net new issues or retirements for 1955 and 1956 is shown in Table 4.28 from which it may be seen that provincial governments and corporations were particularly heavy borrowers abroad in 1956 with municipalities also borrowing a substantial sum. The trade in outstanding securities in these two years showed purchases barely above sales by Canadians in 1955, but in 1956 net sales by Canadians totalled $236 million. The year 1956 was a record one for borrowing abroad and of course most of this borrowing was done in the United States.

To sum up this record very briefly, before turning to the regulators of the flows of funds, we may characterize the years 1955 and 1956 as the years of the beginning of the third post-war wave of inflation. The inflationary wave of demand was spearheaded by demand for capital goods (housing in the first year and business capital in the second) and supported by funds from abroad and from domestic sources, a principal channel for the latter flow being via taxes to government, then via debt retirement to financial institutions and thence to business enterprises, junior governments and even back to consumers through finance companies. This is an over simplification; any generalization is. There was indeed an expansion of credit by the banking system; there were many eddies and cross-currents in the main stream of financial flows. But nevertheless there were two

Table 4.28

NET ISSUES (+) OR RETIREMENTS (—) OF CANADIAN SECURITIES IN TRANSACTIONS WITH NON-RESIDENTS, 1955 AND 1956

(millions)

	1955	1956
Bonds and debentures	—78	468
Government of Canada (direct and guaranteed)	—95	—73
Provincial governments (direct and guaranteed)	—16	222
Municipal governments	25	93
Corporations	8	226
Stocks, common and preferred	60	73
Total, bonds, debentures and stocks	—18	541

SOURCE: Dominion Bureau of Statistics, *Sales and Purchases of Securities Between Canada and Other Countries, December 1956* and *Review of Security Trading During 1956*, p. 2.

broad channels through which funds flowed to the buyers of current output: one, a very large one, came from abroad; the other was that through which banks and life insurance companies were able to obtain funds for spenders by selling Government of Canada securities. But this great demand for funds, the counterpart of the demand for goods, was greater than could be supplied out of the current incomes being generated by productive activity and the pressure in the goods and capital markets was severe. Let us now review briefly the record of the regulators of the flows of funds in this period.

b. The regulators of the flows of funds

Monetary policy was directed toward restraining the increase in credit in the economy from early 1955 throughout the balance of the period. In the second quarter of 1955 the rate of economic activity increased significantly as expenditures on consumer and capital goods advanced sharply and the percentage of the labour force unemployed started to decline from its winter high. Bank loans in Canada, which had been rising since February, began in the second quarter to rise more rapidly, and the liquid asset ratio, the ratio of cash reserves, day loans and treasury bills which was lower in the second quarter than the first after mid-year moved decisively downward. Yields on treasury bills and the shorter government bonds started up in February and by mid-year yields on all government securities were rising. In the third quarter as yields continued to rise and the liquid asset ratio continued to fall the banks began the sales of Government of Canada bonds that continued throughout 1955 and 1956. At the middle of February 1955 the Bank of Canada lowered bank rate from 2 percent to 1½ percent,

a technical move to bring the rate into line with short-term money rates. Later in the year, as interest rates continued to climb, bank rate was raised in three successive jumps to bring it to 2¾ percent on November 18, 1955. The Bank of Canada held meetings with the chartered banks in September, November, and again in December. At the September meeting the Governor of the Bank "discussed with the banks the rapid increase which appeared to be taking place in their term lending to corporations", and "a weekly report for each bank of the amount of its forward commitments in respect of term lending (for items in excess of $25,000) was instituted".[50] The volume of forward commitments unavailed of at the beginning of November when the first complete information became available was found to be in excess of $400 million. On November 21, the Governor expressed to the banks the view that the rate of increase of bank credit was greater than could be tolerated once full employment was reached. At the end of November, it was agreed with the banks that they would "in general cease making new commitments for term lending".[51] This was the third occasion in the post-war period on which such an agreement was reached. Not only had the banks increased their commitments, they had also reduced their liquid assets (cash, day loans and treasury bills) to 11.3 percent of deposits from the 14 percent that had prevailed a year earlier. The Bank of Canada felt that the expansion of loans, by reducing liquid assets (instead of by selling bonds to a greater extent) and the increase of commitments had delayed the reaction of the banking system to tighten monetary conditions and it "urged the adoption of a standard practice regarding the maintenance of a minimum ratio of liquid assets . . . to deposits . . . (to) help the central bank in the task of restraining inflationary pressures that might develop in the future . . . The banks agreed to work to achieve by May 31, 1956, a minimum liquid asset ratio of 15 percent which they will endeavour to maintain on a daily average basis from June on".[52] This agreement necessitated substantial purchases of treasury bills by the chartered banks in the first several months of 1956. The daily average cash reserves of the chartered banks increased from $816 million in December 1954 to $863 million in December 1955. They averaged $816 million over the first half of 1955 and $852 million over the last half.

In 1956 the banks gradually built up their liquid asset ratio to the required amount by the end of April and this undoubtedly restrained their expansion of loans and non-federal investments. The liquid asset ratio remained fairly constant from the middle of the second quarter to the end of the year. Daily average cash reserves increased $27 million

50 Bank of Canada, *Annual Report*, 1955, pp. 17-18.

51 Bank of Canada, *Annual Report*, 1955, p. 18. In the *Annual Report* for 1956 the character of this agreement was amplified: "The banks agreed that they would refrain from making term loans (as defined) in excess of $250,000 to business corporations and likewise would not purchase directly from such a corporation its bonds or debentures or other securities." (p. 33).

52 Bank of Canada, *Annual Report*, 1955, pp. 16-17.

from December 1955 to December 1956 and averaged \$861 million in the first half of the year and \$885 million in the second half. The banks were able greatly to expand loans in the first half of the year in spite of the need to build up the liquid asset ratio. They sold federal bonds at an accelerating rate in the first half, at a considerably diminished rate in the third quarter and at a more rapid rate again in the final quarter. The rise in general loans continued unabated until late in the second quarter and though they rose seasonally during the last half of the year, they declined over the last two months to a level below the value at mid-year.

Bank rate was raised on several occasions during 1956 as yields in the government securities markets continued to rise, and on the first of November the Bank adopted the policy of automatically fixing bank rate at one-quarter of one percent above the average rate on treasury bills at the most recent auction of bills. Bank rate stood at 3.92 percent at the end of the year. As we have observed earlier, interest rates rose substantially over the year and yields on government securities maturing in approximately five years rose above those on longer and shorter securities. Interest rate rises were not confined to government securities of course; yields of corporation bonds, provincial and municipal bonds also rose. The rate on prime commercial loans, which had remained at 4½ percent for many years, rose to 5½ percent and rates on savings deposits in the banks and other institutions also rose.

During 1956 the Bank held discussions with the governing bodies of the three principal stock exchanges concerning the desirability of restraining any further increases in the amount of credit used in stock market trading. Although after November 1955 the banks did not increase their lines of credit to finance companies and retail stores providing instalment finance facilities, actual loans to instalment and other finance companies increased some 28 percent in 1956. The Bank of Canada in 1956 held discussions with the major instalment finance companies "with a view to seeing whether some voluntary agreement could be reached among the leaders of the industry to prevent any further significant increase in the total volume of credit of this character. It turned out that agreement of all concerned could not be reached".[53] The chartered banks then, in November 1956, took steps to ensure that no further increase in their loans to finance companies would take place.[54] Discussions were also held with the major department stores and chain stores but no agreement was reached on restraining increases in consumer credit extended by these concerns. On the other hand major department stores agreed among themselves before the meeting to stop the practice of selling goods without requiring any down payment. It is not clear how successful this agreement was.

53 Bank of Canada, *Annual Report*, 1956, p. 34.

54 *Ibid.*, p. 9.

In the budget of 1955 reductions in the personal income tax were introduced which reduced the income tax payable by some 12 percent to 13 percent for 85 percent of the taxpayers. This reduction did not become effective until July 1, 1955, and so its impact was not felt on all income earned in 1955. No further changes in income tax rates were made in the 1956 budget. Personal income taxes as a percentage of income are illustrated for the years 1954, 1955 and 1956 in Table 4.29. In the 1955 budget the 47 percent rate of tax on corporation incomes over $20,000 was reduced to 45 percent effective January 1, 1955. There were other changes in the tax regulations to which reference will be made subsequently in this volume. Perhaps we might record however that in the 1955 budget, the tax laws giving special incentives to the oil, gas and mining industries which, for several years had been extended annually, were for the most part made permanent.

Table 4.29

PERSONAL INCOME TAXES AS A PERCENTAGE OF INCOME

	Income			
	$1,500	$3,000	$5,000	$10,000
Single, no dependents				
1954	5.7	12.0	15.2	20.2
1955	5.3	11.3	14.4	19.3
1956	5.0	10.7	13.6	18.4
Married, two dependents				
1954	0	4.0	10.1	16.4
1955	0	3.7	9.6	15.6
1956	0	3.5	9.1	14.9

NOTE: The above figures show the actual tax liability of a taxpayer with children who receive family allowance, but average family allowances have *not* been deducted from tax paid. It is assumed that all incomes are entirely earned incomes. The Old Age Security Tax (2 percent of taxable income with maximum of $60) has been included in the tax liability.

We have referred to the fact that interest rates and especially short-term rates rose from about the beginning of 1955 through to the end of 1956. The United States dollar in Canada remained at a discount throughout 1955 and 1956; broadly speaking the discount diminished through 1955 and increased through 1956. During the first seven or eight months of 1955 the difference in yields between comparable United States and Canadian securities narrowed and the value of the United States dollar rose. In the latter part of 1955, while Canadian yields were rising United States yields were not; the spread widened but the United States dollar continued to appreciate. After the first quarter of 1956 when the difference in yields was reduced slightly and the rate of exchange remained fairly steady, the difference in yields again increased considerably and the value of the United States dollar fell to a discount of almost 4 percent by the year-end. During the first and last eight-month intervals of the period 1955 to 1956 the relation between the rate of exchange and the difference in bond

yields as between Canada and the United States, which we had noticed in Period III, again emerged. It was not so apparent in the middle eight-month interval.

c. Concluding observations

In the fourth period of the post-war interval Canadians enjoyed a recovery from the unemployment of 1954 and the first quarter of 1955, but the demands for current output, especially of capital goods, made effective by funds deriving from private domestic saving, the application of government surplus and cash to debt retirement, credit expansion, and foreign sources, exceeded the supplies that could be made available and inflation resulted for the third time since the war. Measures of monetary control were used with determination and many avenues of defence were explored by the monetary authorities. Interest rates rose substantially, serving to attract funds from abroad, strengthen the exchange rate and encourage the flow of goods from abroad. But prices of goods and services rose though yields in the capital markets rose much more relatively to prices of goods than in either of the two preceding post-war inflations. The prime rate on bank loans crowded the statutory ceiling of 6 percent on bank lending rates and thus this particular instrument of rationing in the capital markets was prevented from rationing to the extent it might have. The ceiling on mortgage rates charged on loans made under the National Housing Act, being kept from rising *pari passu* with rates on conventional mortgages, resulted in a diversion of funds from this type of home buyer to other demanders. Since interest rates were given freer rein however in this period, and since monetary policy was pursued with great vigour, some of the rigidities in the capital market and limitations of monetary policy were revealed. These rigidities and limitations we shall have to explore more fully below.

6. Summary and concluding observations

The review in this chapter of the aggregate indicators of economic activity and its financing in the post-war years has been long and rather detailed. In this final section we shall give a brief recapitulation and then offer a few observations on the performance of the regulators of the flows of funds relative to the objectives that have been sought.

The post-war period has been one of very considerable growth in the economy. Through much of it, demand has pressed heavily against supply in the markets for goods and services and reflecting this, the demand for funds has pressed heavily against their supply. This buoyant demand for goods, and for funds has forced up prices of goods and yields of securities in three successive waves of inflation. This over-all development is exhibited in three charts which follow. In Chart 4.1, the growth of real output and output measured in current prices is shown.

In Chart 4.2, the movements of wholesale prices in Canada and the United States and consumer prices in Canada are pictured and yields of selected securities in Canada and the United States are compared in Chart 4.3.

The sectors into which we have divided the economy in the National Transactions Accounts, have fairly consistently retained their status as net suppliers of funds to or net demanders of funds from other sectors. To be rather more specific, the consumer sector throughout the period has had a surplus of current income over expenditure on currently-produced goods and services. The federal government had a deficit in only two years: 1946 and 1954; the provincial governments had a deficit in only one year, 1949. The municipalities have consistently had a deficit as have non-financial businesses taken as a whole, though corporations showed a surplus in 1952 and government enterprises showed a surplus in 1946. The rest of the world was a deficit sector during the period of heavy foreign lending by the federal government in the early post-war years. It showed a deficit again in 1952, but apart from this one year the characteristic of the fifties has been substantial surpluses for the rest of the world. These surpluses reached quite exceptional figures in 1955 and especially 1956. The changes in the surpluses and deficits of the main sectors of the economy are pictured in Chart 4.4.

In the early post-war period, business and consumers were eager to use government bonds and bank balances accumulated during the war to acquire the goods and equipment so long denied to them. Their expenditures more than offset the effects of the decline in government defence expenditures. Foreign demand was supported by government loans and stimulated by price rises abroad, though restrained in some countries by official exchange restrictions. The over-all eagerness of buyers of Canadian goods permitted the absorption of increased costs of imports resulting from the rise in prices in other countries and carried wholesale prices in Canada up some 50 percent between the beginning of 1946 and the end of 1948. There were very considerable relaxations of wartime control over prices and supplies in this period, but through income tax regulations respecting depreciation allowances and through the remaining controls over materials, there was considerable direction of expenditure by official regulation. Monetary policy throughout the period was directed more toward stabilizing government bond prices than to restricting the demand for credit and stabilizing prices of goods. Though there were reductions in taxes, the federal government developed substantial surpluses in 1947 and 1948 and used these together with the resources of other government accounts to acquire and in part to retire large volumes of government securities being placed on the market by individuals, business concerns and financial institutions. The movements of consumer prices and government bond yields in Canada and the United States in this period are compared in Charts 4.2, 4.3 and 4.5.

After a year and a quarter of considerably relaxed pressure in the economy, demands increased substantially again and by the second quarter of 1950 wholesale prices were once more moving above the levels they had attained in the first post-war wave of inflation. Speculative buying in the private sector of the economy and an accelerating defence programme, both generated by the crisis in Korea, increased the pressures in the economy and induced the second post-war inflation which continued until the middle of 1951. Monetary policy in this period was more flexible and more appropriate. The handling of the great and sudden influx of United States dollars which preceded the freeing of the exchange rate in October of 1950, we have described as "resolute". A variety of special controls on credit were applied in this period in addition to traditional open market operations. These included the ceiling on bank loans, consumer credit controls, restrictions on term loans by banks (also imposed by agreement in 1948) and restrictions on loans to instalment finance companies. Budgetary policy embraced the increase of taxes and the imposition of deferred depreciation regulations. In the management of the federal debt the surpluses of the government acquired through taxation were to a very considerable extent channelled back into the hands of private spenders. This policy was helpful in the circumstances of 1949 but mitigated the rise in interest rates in late 1950 and early 1951. Changes in prices and bond yields in Canada and the United States in the second period of inflation are shown in Chart 4.5.

During 1952 and 1953 the economy enjoyed a period of growth that was free of inflation. In 1954, in common with the United States, a mild recession was experienced, but this was short-lived. Renewed upsurges of demand in 1955 entailed further rises in prices that persisted through 1956. Monetary policy was again adapted to the requirements of the day, though its effects on interest rates were attenuated by debt retirement especially in 1956. While the surplus of the federal government increased in 1955 and 1956 this was not the result of any increases in tax rates; tax rates were indeed reduced during this third wave of inflation. The relative movements of prices and yields of government securities in this period are shown in Chart 4.5. We have remarked earlier that in each successive post-war inflation, the yields of securities have risen more, relatively to prices, as monetary policy has been more forcibly applied. This fact emerges clearly from a comparison of the three panels of Chart 4.5. The relation between the differences in yields of Canadian and United States federal government securities and the price of the United States dollar in Canada has been a fairly close one since the freeing of the exchange rate by the Canadian authorities in the fall of 1950. An indication of this relation is displayed in Chart 4.3. Too much must not be made of it of course, in particular no one should conclude that transactions recorded in the capital account of the balance of payments determine the rate of exchange! Rather, transactions in goods, services

and financial assets are determined by and determine prices of goods, securities and currencies. However, this mutual determinacy ensures that prices, yields and exchange rates will be interrelated. The relation between yields and the exchange rate tended to take a particular form during the 1950's, with the price of the American dollar rising in Canada when the spread between Canadian and United States yields narrowed. This is the relationship exhibited in Chart 4.3.

Some of the objectives which have been sought in the Canadian economy in the post-war period have been achieved with outstanding success. There has been no major post-war recession. It had been commonly thought that a sharp rise in prices after the war might quickly be followed by slackness in the economy with considerable unemployment of resources in the latter part of the transition period. In fact no such recession developed in that period, nor indeed until 1954 and even then, it is gratifying to write, the recession was mild and short-lived. Seasonal unemployment we have had each winter, but viewing the period up to the end of 1956 as a whole, surely Canadians are entitled to relief and satisfaction that the aim of maintaining "high and rising levels of employment" set forth explicitly in the White Paper on *Income and Employment* in 1944 has been very largely realized.

The multi-dimensional objective of economic growth has also been served well in the post-war period. The population has grown, real output has grown, output per head and consumption per head all have grown. There has been an increase in the stock of capital that has added to the productive capacity of the economy. The discovery of new resources has proceeded apace under the stimulus of growing demands for them. There have been some industries that have languished or lagged in the period but it would be difficult to review the records of the post-war years and conclude other than that the economy has been enormously prosperous and has enjoyed one of its great periods of expansion.

The objective of providing social capital has been attended to as well. While vast sums have been spent on industrial capital, very large sums have also been spent to divert resources into social capital. Over the years 1946 to 1956 expenditures for social capital have been nearly 39 percent of all expenditures on new construction and new machinery and equipment. The annual percentages are shown in Table 4.30, along with averages for the years 1937-39 and 1927-29. Although the figure for the years 1937-39 is higher than that for the post-war period, the latter figure is higher than that for 1927-29, indicating that we have not devoted a smaller but probably a rather larger percentage of our investment expenditures to social capital in the post-war years than in our last great period of economic growth.[55]

[55] For purposes of these comparisons, social capital has been defined as capital expenditures by government departments, expenditure on new residential construction, and new investment expenditures by "institutions" (embracing churches, hospitals, schools and universities).

Table 4.30

RATIO OF EXPENDITURES ON SOCIAL CAPITAL TO TOTAL CAPITAL EXPENDITURES, SELECTED YEARS

1927-29	35.0
1937-39	45.0
1946	41.7
1947	37.0
1948	38.0
1949	39.1
1950	39.3
1951	36.1
1952	36.5
1953	37.8
1954	40.6
1955	43.2
1956	38.2
1946-56	38.9

SOURCE: *Private and Public Investment in Canada 1926-1951*, Department of Trade and Commerce, Ottawa, 1951 and *Private and Public Investment in Canada Outlook*, Department of Trade and Commerce, Ottawa, various years.

Progressively throughout the post-war years direct controls over the economy, inherited from the war, were relaxed. Price controls were abandoned by stages, wage controls were dropped. Controls over scarce materials were used to a decreasing extent though they were revived in some degree during the period of shortage associated with the Korean War. Controls over the exchange rate were successively relinquished until the end of 1951 when they were dropped entirely. With official action now restricted to the stabilization activities of the Exchange Fund account, Canada has a freer foreign exchange market than most other countries. Yields of government bonds which were virtually pegged in the earlier post-war years were later given a great deal more freedom. In the main then, the trend has been to restore the price system to the place it occupied before the war brought a very large measure of central management of economic activity.

If considerable success has been achieved in maintaining employment, in securing a larger basketful of goods for each consumer, in acquiring social as well as industrial capital and in restoring the price system after the war, the same can hardly be said of the control of inflation. The inescapable fact is that, even though our record may compare favourably with that of other countries, wholesale prices at December 1956 were 70 percent higher than in January 1946 and consumer prices were 60 percent higher.

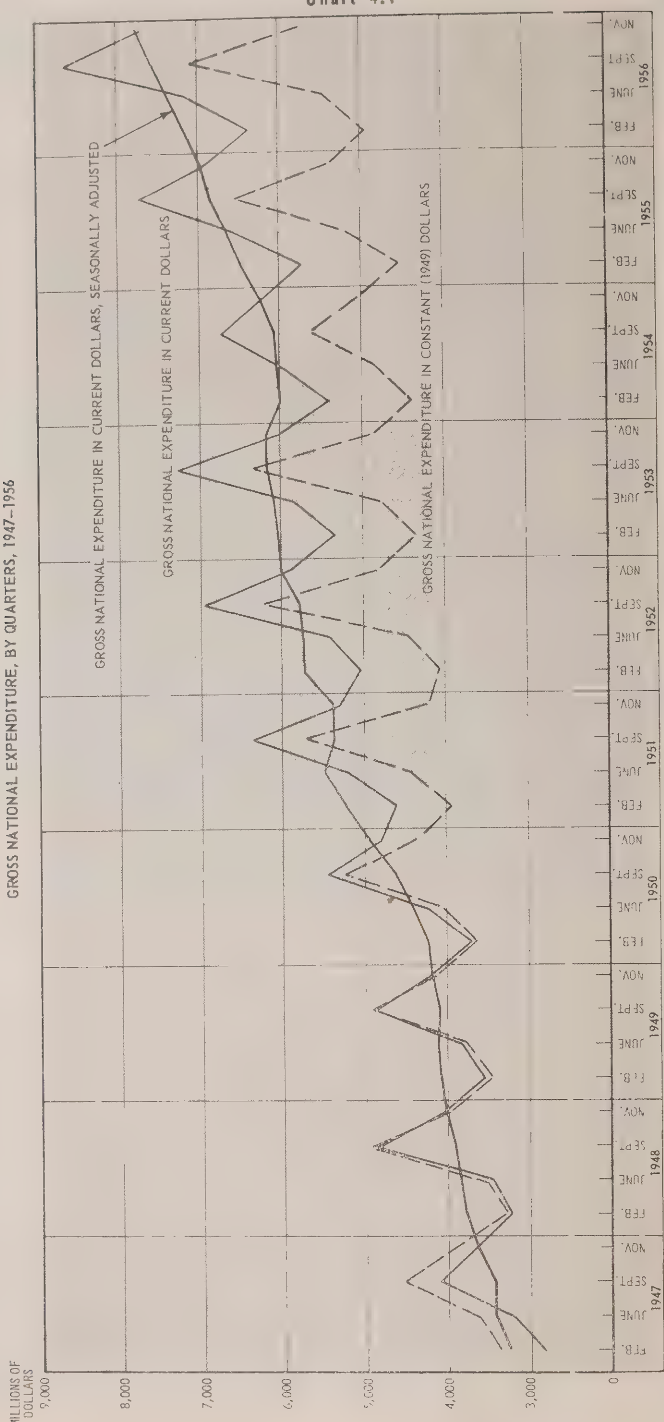
In this macroscopic review of the post-war record, we have not brought the workings of the price system into focus. We have directed our attention to official regulators, such as central bank policy, government debt policy, fiscal policy and broad movements of average or representative prices and interest rates. Certain aspects of the working of the price system in the capital market we shall have to explore in the following chapters. However, some misgivings as to the performance of the regula-

tors of the flows of funds have emerged in this review of the aggregates. The fact that the economy operated under severe pressure through much of the post-war period has shown some weaknesses of the monetary and capital market machinery in relief.

In particular, as the central bank exercised its control more vigorously it found itself obliged to use or recommend a variety of selective controls and to report that in the absence of other specific controls or remedies in special sections of the capital market it could not do more to preserve the value of money. Need was felt to impose a ceiling on bank loans on one occasion, to restrict term lending by banks, to recommend limitation on loans to finance companies, to place restrictions on credit to consumers,[56] to offer suggestions for the future regulation of finance companies and for the future allocation of bank investments — to mention some of the special measures adopted. The fact that need was felt to adopt such measures points a finger to the working of the price system in the capital market. Does it work equally smoothly and quickly in all areas? Do impulses in one quarter of the capital market spread to other quarters? Are suppliers and demanders of funds responsive to changes in the cost of borrowed money? Do the costs of borrowed money vary or vary freely and readily? These are questions that were raised in Chapter 2. We have not disposed of the questions in this chapter, but the record of the performance and pronouncements of the monetary authorities here reviewed attests to their relevance. These questions will now come increasingly to the fore in our discussion, as we turn to consider, against this background of post-war experience, the financial problems associated with particular groups and institutions in the economy.

56 Formally, these restrictions were not imposed by the Bank of Canada, they were imposed under authority then available to the government through the Emergency Powers Act which is no longer in force.

Chart 4.1



SOURCE: Dominion Bureau of Statistics, National Accounts, Income and Expenditure, By Quarters 1947–1952, and subsequent publications in this series.

Chart 4.2

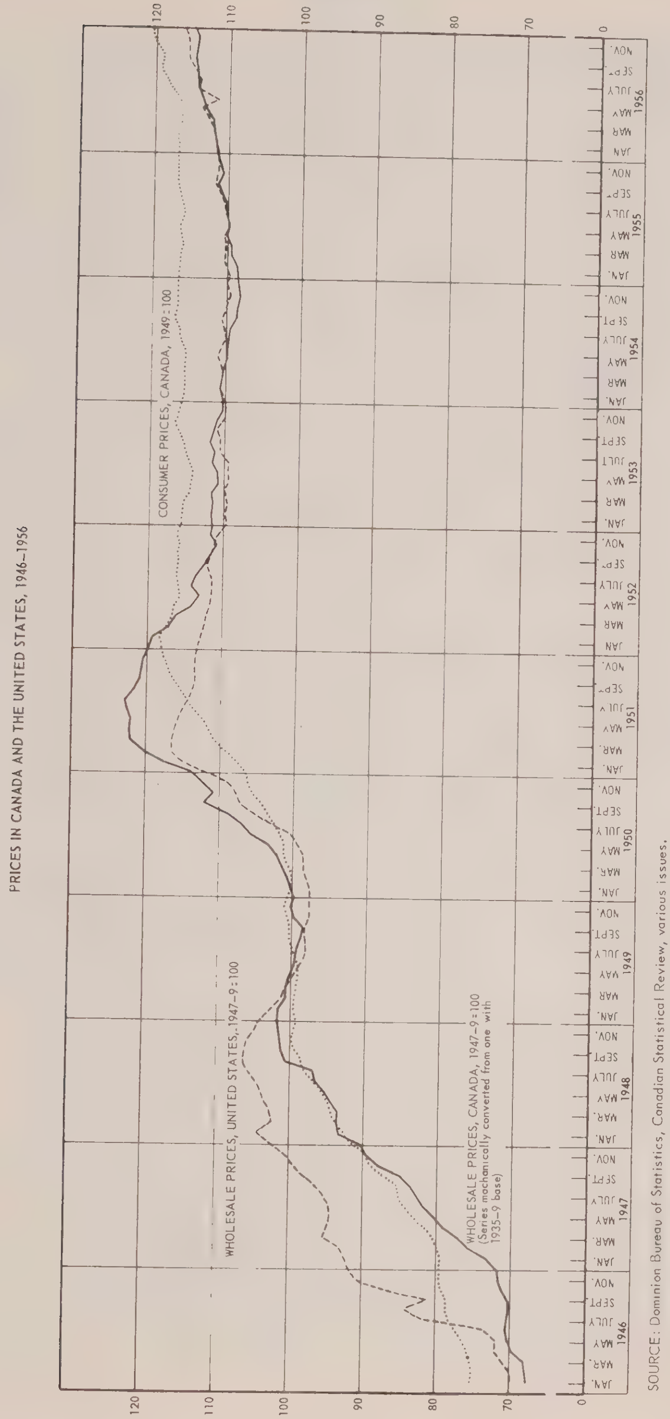
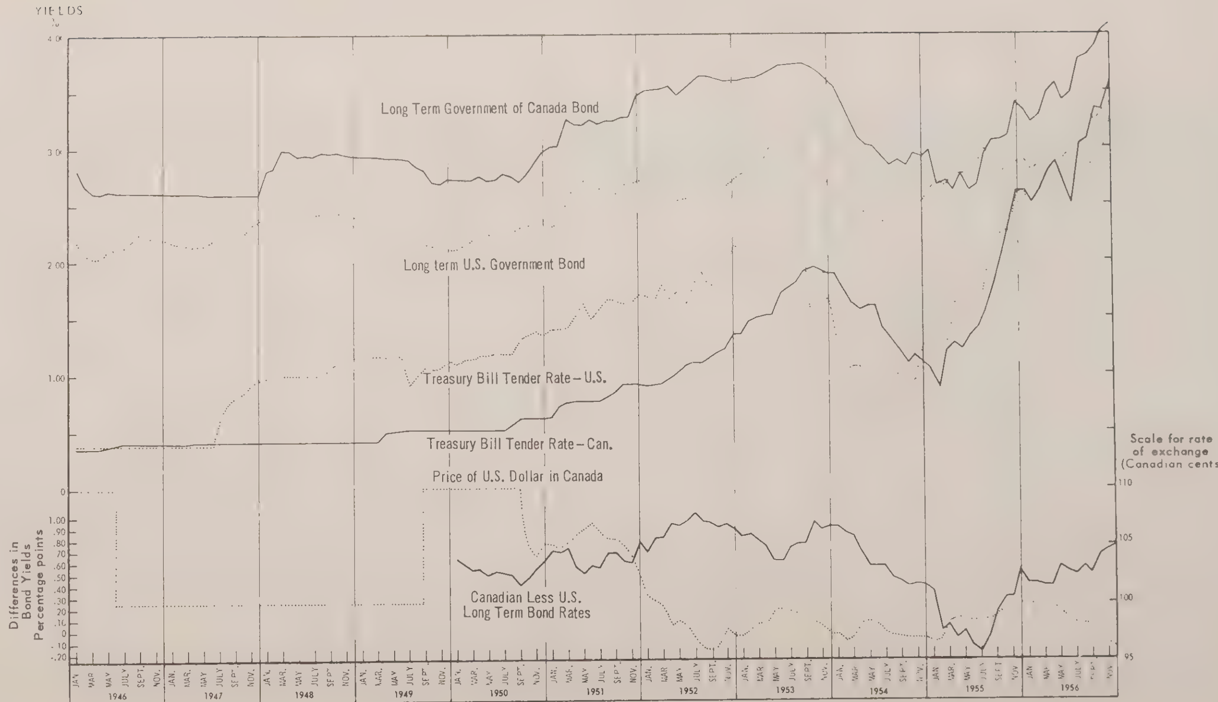

PRICES IN CANADA AND THE UNITED STATES, 1946–1956
CONSUMER PRICES, CANADA, 1949 = 100
WHOLESALE PRICES, UNITED STATES, 1947–9 = 100
WHOLESALE PRICES, CANADA, 1947–9 = 100
(Series mechanically converted from one with 1935–9 base)
120
110
100
90
80
70
0
JAN. MAR. MAY JULY SEPT. NOV.
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
SOURCE: Dominion Bureau of Statistics, Canadian Statistical Review, various issues.

Chart 4.3

GOVERNMENT SECURITY YIELDS AND THE PRICE OF THE U.S. DOLLAR



SOURCE: Bank of Canada STATISTICAL SUMMARY various issues.

Long term Government of Canada Bond is the 3% bond due September 1, 1961–1966.
Long term U.S. Government bond is the 2½% bond due December 15, 1963–1968.

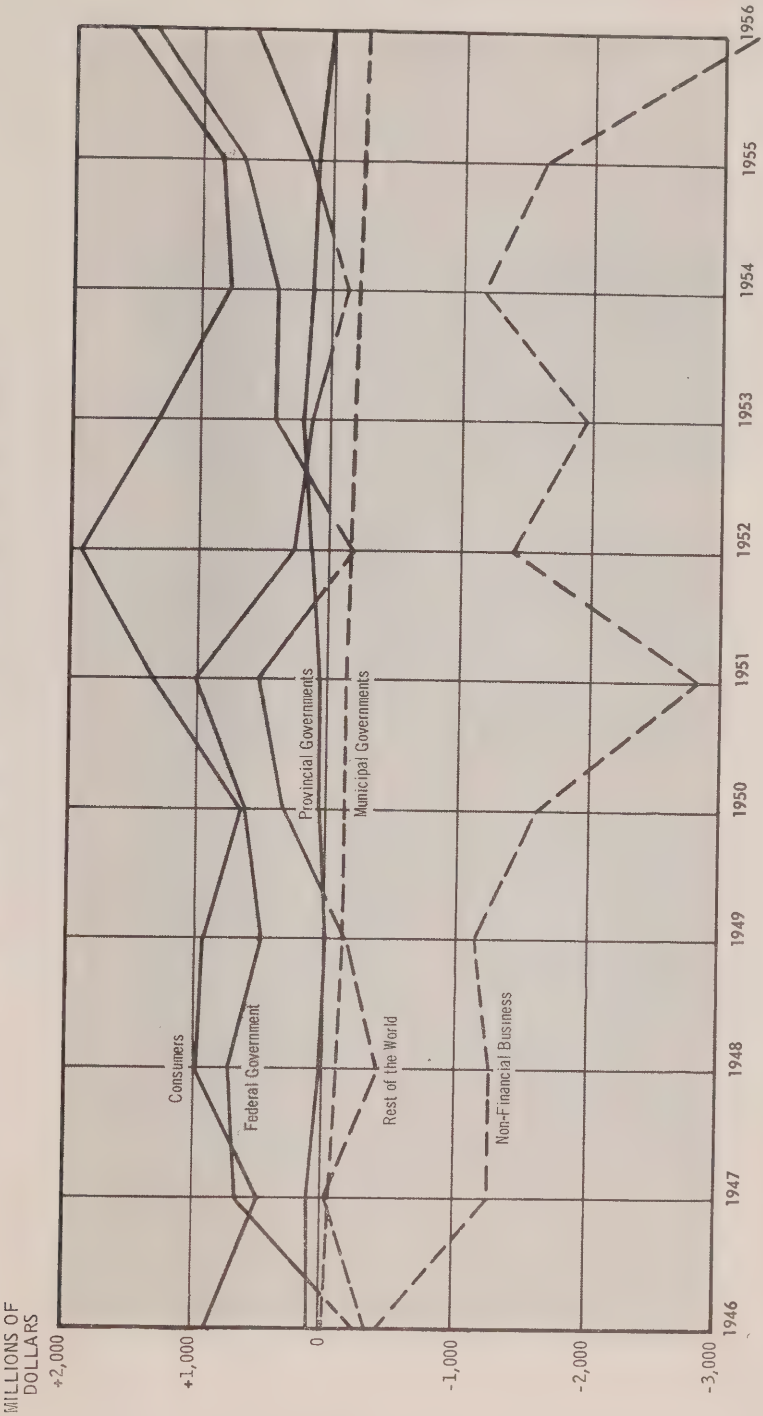
The quotations for the long term bonds are averages over the business days of the month of daily opening quotations until the end of 1950.
For the balance of the period, the quotations pertain to the Wednesday nearest the middle of the month and are based on closing bids.

The quotations for treasury bills pertain to the Wednesday nearest the middle of the month, and are the weighted average of tender rates on three month bills.

The exchange rate is the official buying rate for U.S. dollars until October 1950 but from there on it is the average of the noon spot rates over the business days of the month.

Chart 4.4

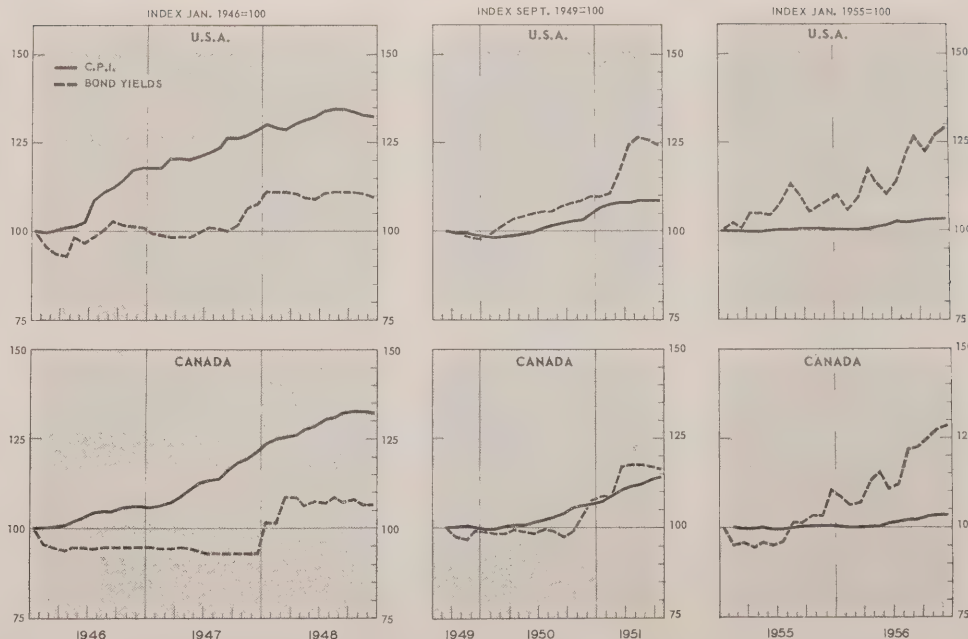
ANNUAL SURPLUSES OR DEFICITS OF MAJOR SECTORS OF THE ECONOMY



Source: Tables 4.8, 4.11, 4.17, 4.24

Chart 4.5

INDEX NUMBERS OF CONSUMER PRICES AND GOVERNMENT SECURITY YIELDS



SOURCES – **Canada:** Consumer Price Index – Total index relating to first of month on the base 1949=100

Bond Yields – Theoretical rate on 15 year Government of Canada Bonds, as of the middle of the month

Both of these series are reported in the **Statistical Summary** of the Bank of Canada and its supplements.

United States: Consumer Price Index – Published in **Consumer Price Index** issued by Bureau of Labour Statistics, U.S. Department of Labour.

Bond Yields – The yield of the 2½% U.S. Government Bond maturing Dec. 15, 1963–1968. For the years 1946–1950 the date for each month are averages of yields over the business days of the month; for the years 1951 to 1956, the data pertain to the Wednesday nearest mid-month. This series is reported in the Statistical Summary of the Bank of Canada.

PART III

SOME PROBLEMS OF FINANCE IN INDIVIDUAL SECTORS OF THE ECONOMY

5

CONSUMER FINANCE*

A. *Introduction*

The heading chosen for this chapter is ambiguous, but deliberately so inasmuch as we shall consider the supply of finance *by* consumers and *to* consumers. The institutions specializing in supplying financial accommodation to the consumer sector will be discussed as well as the saving, lending and borrowing practices of consumers. Following the standard pattern for the chapters in this volume we shall first review the facts, statistical and otherwise, insofar as we have them, then turn to a discussion of regulators of the flows of funds into and out of the consumer sector and finally comment on the strengths and weaknesses of existing practices and patterns. It should be remembered in reading the chapter that not all relevant aspects of the regulation of the flows of funds are covered here, some of them are reviewed in subsequent chapters. In the final chapter of the volume we shall try to tie together, in an over-all assessment, the separate appraisals of the financial machinery developed in the chapters on individual sectors of the economy.

A discussion of the financing of economic activity in the consumer sector is complicated by two considerations: the "split personality" of many individuals and the inadequacy of data. By "split personality" we refer to the fact mentioned earlier that many consumers are also proprietors or entrepreneurs in unincorporated business. Many such consumer-proprietors make no attempt to keep separate accounts for their diverse activities and any attempt to separate them must be based on conventions of doubtful utility. The paucity of information is related in part to the existence of such transactors. We need data from surveys of consumers and unincorporated enterprises that distinguish relatively homogeneous groups of consumers or consumer-proprietors and that provide estimates of sources and uses of funds, assets and liabilities for each such group. Such groups might, for example, be households not engaged in any business, farm households, households with members engaged in independent pro-

* Charts referred to in this chapter appear on pp. 198-201.

fessional practice, and other households. Apart from income tax data, which fall far short of requirements in this field,[1] we have practically no information permitting the separation of households into groups as described. With one exception we have no official survey information in Canada at all giving financial data about consumers.[2] This being the case, we shall have to refer in this chapter to data for the United States, which though not ideal even for analysis of the American situation are rather more extensive than Canadian information.

B. A Factual Review

1. Consumers

a. Aggregative data for all consumers

As we have seen in Chapter 4, the consumer sector of the economy has been a net supplier of funds to other sectors of the economy throughout the post-war years. The ratio of the net amount supplied by the consumer sector — personal saving — to personal disposable income in the period 1946 to 1956 is shown in Table 5.1. Roughly comparable figures for the United States are given for the same years. (The reader may consult the original sources for detail of the conceptual differences between the two series — broadly they are defined similarly.) In both countries the ratio for the second quinquennium of the period was somewhat higher than for the first, though this difference was greater for the United States than for Canada. In 1956, the ratio was lower than the average for the preceding five years in both countries.

There is an enormous transfer of funds between the government sector and the consumer sector. In the current transactions account it is recorded that over the eleven post-war years, consumers received transfer payments from the government totalling $13.8 billion. Offsetting this were transfers from consumers to the government sector as contributions to social insurance and government pension funds amounting to $3.5 billion and transfers represented by direct tax payments amounting to $12.4 billion On this particular calculation, which excludes several classes of transactions,[3] there was a net transfer from the consumer sector to the government sector of $2.1 billion in the period 1946 to 1956.

In considering the main financial channels through which funds flow into and out of the consumer sector, Table 5.2 will be helpful as it shows the aggregate flows over the period 1946 to 1954. In interpreting the table it must be remembered that our data for the consumer sector are in many respects very weak[4] and that the flows in some categories

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1 Income tax data pertain to taxpayers not households, of course.

2 We shall refer to the exception, a recent DBS survey, in the next section.

3 Such as, for example, transactions in Canada Savings Bonds, payments of indirect taxes by consumers, and wages, salaries and interest received directly by the consumer sector from government.

4 Note the liability item under credits entitled "Other transactions and errors"; it amounts to 16 percent of the net increase in assets (or liabilities).

Table 5.1

PERSONAL SAVING AS A PERCENTAGE OF PERSONAL DISPOSABLE INCOME

Year	Canada	United States
1946	10.0	7.6
1947	5.2	2.3
1948	9.0	5.6
1949	7.8	3.6
1950	5.2	5.9
Average	7.3	5.0
1951	9.0	7.8
1952	8.0	8.0
1953	7.8	7.9
1954	4.8	7.0
1955	4.7	5.8
Average	6.8	7.3
1956	7.6	7.0
Grand Average	7.1	6.2

SOURCES: Canada—D.B.S., *National Accounts: Income & Expenditure, 1926-1956.*
United States—Department of Commerce, *Survey of Current Business*, various issues.

are estimated with greater accuracy than in others. Moreover, private pension funds have not been presented separately as financial intermediaries, but have been consolidated with this sector. Thus, net contributions to such funds are not included in "Insurance and pensions" but, instead, the investments of the funds are included in the bond, stock and other appropriate categories. Finally, once again it must be recalled that flows directly related to the business of home owning are recorded in the unincorporated business sector.

Of the net increase in assets recorded, over one-quarter is represented by currency and bank deposits and 45 percent by currency, deposits and non-marketable Government of Canada bonds. Another 35 percent of the net increase in assets is represented by the mortgage lending of individuals (some part of which arises from inter-personal sales of houses) and insurance and pension contributions. Over one-fifth of the net increase in assets is represented by increases in claims on unincorporated enterprise. There has been a very marked *reduction* in the holdings of marketable Government of Canada bonds by the consumer sector in the period 1946 to 1954 amounting to some 20 percent of the *net* increase in assets over the period.

Offsetting the net increase in assets is gross saving by the consumer sector. Saving is estimated here to have amounted to some two-thirds

Table 5.2

AGGREGATE FINANCIAL TRANSACTIONS ACCOUNT
1946-54

Consumers Sector

	Millions of dollars	%
Debits: asset items		
Canadian currency and bank deposits	3,430	26
Other institutional deposits	976	7
Claims on associated enterprises	2,920	22
Mortgages	1,690	13
Government of Canada marketable bonds	—2,657	—20
Government of Canada non-marketable bonds	1,582	12
Other bonds and stocks	1,653	12
Insurance and pensions	2,959	22
Foreign inheritances and migrants' funds	678	5
Other transactions	134	1
Total debits	13,367	100
Credits: liability items		
Gross saving	8,714	65
Consumer charge accounts	288	2
Instalment credit	757	6
Bank loans	380	3
Other loans	440	3
Foreign inheritances and migrants' funds	685	5
Other transactions and errors	2,103	16
Total credits	13,367	100

of this increase in assets. Other transactions and errors account for another 16 percent of the offset.

Consumer charge accounts and instalment credit together accounted for 8 percent of the net increase in assets, while the increase in bank loans and other loans amounted to 6 percent.

The increase in consumer credit as estimated by the Bank of Canada in its *Statistical Summary* amounted to $1,583 million, and was comprised of : consumer charge accounts, $288 million; instalment credit, $762 million[5] and "cash personal loans" (extended by chartered banks, small loan companies, licensed money lenders and credit unions), $533 million. The increase in these selected items of consumer credit amounted to 11.8 percent of the net increase in assets in the consumer sector.

In Tables 5.3 and 5.4 selected items of consumer credit outstanding in Canada and the United States are shown. The Canadian figures are those published by the Bank of Canada; the American figures are a selection from those published by the Federal Reserve Board. Undoubtedly

5 In the National Transactions Accounts, we record as instalment credit, the figure reported by D.B.S. in *Sales Financing*. The Bank of Canada also includes such credit extended by companies not included in the D.B.S. tabulation. The increase in this item from 1946 to 1954 is estimated at some $5 million and is included in the NT Accounts with "other transactions".

Table 5.3

CONSUMER CREDIT OUTSTANDING—CANADA

(Millions of dollars as at Dec. 31st.)

Year	Charge Accounts	Cash Personal Loans	Instalment Credit						Total
			Retail dealers	Licensed money lenders and small sales loan companies	Finance companies[a]			Total[a]	
					Passenger cars	Other	Total		
1945	75	128	49	—	—	—	8	57	260
1946	102	186	61	—	—	—	24	85	373
1947	172	240	105	—	—	—	48	153	565
1948	208	262	127	—	—	—	71	198	669
1949	228	302	161	—	—	—	116	277	807
1950	255	378	199	—	—	—	202	401	1,034
1951	283	381	123	1	161	24	185	309	973
1952	309	460	243	0	299	74	373	616	1,385
1953	339	567	284	4	411	105	516	804	1,710
1954	363	661	322	5	394	98	492	819	1,843
1955	374	830	377	6	478	121	599	982	2,186
1956	389	910	409	13	614	143	756	1,178	2,477

a Before 1951 includes small loan companies and licensed money lenders; from 1951 on sales finance companies are defined as instalment credit companies not licensed under the Small Loans Act and in addition as licensed companies whose instalment credit amounts to more than 50 percent of their total credit.

SOURCE: Bank of Canada, *Statistical Summary*.

somewhat different definitions underlie the figures for the two countries, but the figures are roughly comparable. In both countries there has been an enormous growth in instalment credit outstanding, that has far outstripped the growth in cash loans and charge accounts. The percentage increments in the three main categories of consumer credit in the post-war period in Canada and the United States are compared in Table 5.5 It would appear from these figures that the growth of consumer credit outstanding — at least the items on which we have reported — has been at a slightly more rapid rate in Canada than in the United States in the post-war years.

The level of consumer debt per head of the population aged 14 and over is higher in the United States than in Canada and the relative differential has narrowed only slightly in the post-war years. In 1945 consumer debt per head of population of working age was $33 in Canada, a figure which is 77 percent of the comparable figure of $43 for the United States. In 1956 the figure in Canada of $232 was 74 percent of the United States figure of $315. The increase in these debt per head figures was over 600 percent in both countries from 1945 to 1956, though it was slightly greater in the United States. Details are shown in Table 5.6.

Table 5.4

CONSUMER CREDIT OUTSTANDING—UNITED STATES
SELECTED ITEMS[a]

(Millions of dollars as at Dec. 31st.)

Year	Charge Accounts	Loans[b]	Instalment Credit[c]			Total
			Automobile	Other	Total	
1945	1,612	1,755	455	816	1,271	4,638
1946	2,076	2,618	981	1,290	2,271	6,965
1947	2,353	3,266	1,924	2,143	4,067	9,686
1948	2,673	3,669	3,018	2,901	5,919	12,261
1949	2,795	3,963	4,555	3,706	8,261	15,019
1950	3,291	4,635	6,074	4,799	10,873	18,799
1951	3,605	5,291	5,972	4,880	10,852	19,748
1952	4,011	6,231	7,733	6,174	13,907	24,149
1953	4,124	6,968	9,835	6,779	16,614	27,706
1954	4,308	7,800	9,809	6,751	16,560	28,668
1955	4,544	9,248	13,468	7,626	21,094	34,886
1956	4,702	10,605	14,436	8,139	22,575	37,882

a Items included in the Federal Reserve series and omitted here are Repair and Modernization Loans and Service Credit.
b Includes "Personal Loans" and "Single Payment Loans" in the U.S. series.
c Excludes Repair and Modernization Loans.

SOURCE: Federal Reserve Bulletin, April 1953, October 1956, July 1957.

Considerable interest is often shown in the ratio of consumer debt outstanding to personal disposable income. Such a ratio is indicative of little else than the relative rates of growth of the two aggregates. One cannot draw any conclusions as to whether the level of consumer debt is "too high" (in some sense) relative to disposable income without consideration of the concentration of consumer debt and other consumer assets and obligations by income classes. One might for example draw one conclusion if the increase in debt has been incurred in one group of income classes while the increase in income was enjoyed by another group of income classes and another conclusion if those who enjoyed increased incomes also

Table 5.5

PERCENTAGE CHANGES IN CATEGORIES OF CONSUMER CREDIT 1945-56[a]

Canada and the United States

	Canada	United States
Charge accounts	222	124
Loans	333	262
Instalment credit	910	692
Total of selected items	443	376

a The average of the years 1954 to 1956 is considered as a percentage of the average of the years 1945-47.

Table 5.6

CONSUMER DEBT OUTSTANDING PER HEAD OF POPULATION AGED FOURTEEN AND OVER

Year	Canada	United States
1945	$ 33	$ 43
1946	43	64
1947	63	88
1948	73	111
1949	87	134
1950	108	166
1951	100	173
1952	140	209
1953	169	238
1954	179	244
1955	208	293
1956	232	315

added to their consumer debt. In both Canada and the United States, as is shown in Table 5.7, the ratio of selected items of consumer credit outstanding to disposable income increased about fourfold from 1945 to 1956. Undoubtedly the ratio was abnormally low at the end of the war; American data and such Canadian data as we have indicate this. It is partly for this reason but also because of the more widespread use of consumer credit especially in the financing of durable goods, that the ratios have risen in both countries.

Very explicit evidence of the increase in the importance of consumer debt in financing purchases of durable goods is found in the figures of the proportion of new cars sold that are financed with instalment credit supplied by instalment finance companies. In Canada in 1956, of the consumer instalment credit outstanding on the books of instalment finance companies, just over 80 percent was represented by paper relating to consumer purchases

Table 5.7

RATIO OF CONSUMER DEBT OUTSTANDING (SELECTED ITEMS) TO PERSONAL DISPOSABLE INCOME

Year	Canada %	United States %
1945	3.1	3.1
1946	4.2	4.4
1947	5.9	5.7
1948	6.0	6.5
1949	6.7	8.0
1950	8.1	9.1
1951	6.6	8.7
1952	8.7	10.2
1953	10.2	11.1
1954	11.0	11.3
1955	12.0	12.9
1956	12.4	13.2

of new and used cars, and this paper represented one-quarter of the total of the selected items of consumer credit outstanding. The proportion of the *new* cars sold that are financed by instalment finance companies increased steadily throughout the post-war years;[6] it rose from some 14 percent in 1946 to 47 percent in 1956. The details are shown in Table 5.8. It may be noted that domestic new car sales include sales to businesses as well as to consumers.

Table 5.8

RATIO OF NUMBER OF NEW CARS FINANCED BY INSTALMENT FINANCE COMPANIES TO NUMBER OF DOMESTIC NEW CAR SALES

	%		%
1946	14.3	1952	42.8
1947	17.2	1953	40.8
1948	20.5	1954	40.6
1949	26.3	1955	40.4
1950	29.9	1956	46.6
1951	29.6		

SOURCE: Bank of Canada, *Statistical Summary*, November 1955 and June 1957.

Results from the Survey of Consumer Finances conducted by the Board of Governors of the Federal Reserve System in co-operation with the Survey Research Centre of the University of Michigan indicate a similar trend in the United States. It has been stated that "survey data indicate that the proportion of spending units that reported purchasing new and used cars on credit increased from 40 percent in 1948 to 60 percent in 1955".[7]

b. Data for classes of consumers

The figures that we have shown of financial flows and of consumer debt outstanding are highly aggregative. It is of considerable interest to study information on the distribution of financial assets and liabilities or changes in these by characteristics of consumers or households or "spending units", such as income, age, family status and occupation. We have very little information of this kind for Canada; there is rather more for the United States. Our recent information for Canada, on the size distribution of the income of persons or households is very limited, and only in a survey being tabulated as this is drafted has data been collected on the financial assets and liabilities of households. Without such information we cannot know, for example, whether the use of consumer credit is restricted to those with low to medium-level incomes or how widely distributed is the ownership of stocks and bonds and most other financial assets. We shall report in the next few pages on such information about these matters as is available for Canada and supplement it with other data pertaining to the United States. Because of the lack of Canadian data we shall draw rather more heavily on American data in this section than

6 Except for 1951 when the consumer credit restrictions were in effect.

7 "1956 Survey of Consumer Finances; Consumer Indebtedness", *Federal Reserve Bulletin*, July 1956, p. 692.

in many other parts of this volume. We shall give information first on the size distribution of income, and the distribution of consumer saving by income level. We shall then review data on consumer asset holdings and liabilities, with special reference to the income levels of consumers.

(i) Income and saving

The income before taxes and the saving of "income units" ranked by income are shown in Table 5.9. Income distributions are shown for Canada, the United States and the United Kingdom; saving distributions for the latter two countries only. The income distributions are remarkably similar and they show that about 45 percent of total income was received by the top 20 percent of "income units" in a ranking of units from those with highest income to those with lowest. Only 4 percent to 5 percent of total income received by all units was received by units in the bottom 20 percent of the ranking.

Table 5.9

INCOME AND SAVING OF INCOME UNITS RANKED BY INCOME BEFORE TAXES

Tenths of income units[a] after ranking by income before taxes	Percent of total income taken by each tenth			Percent of total saving accounted for by each tenth	
	Canada 1951[b]	United States 1949[c]	United Kingdom 1952[d]	United States 1949[e]	United Kingdom 1952[f]
Top tenth	29	30	30	105	225
Second tenth	15	15	14	26	20
Third tenth	12	12	12	13	—13
Fourth tenth	11	11	10	8	—13
Fifth tenth	9	9	9	1	4
Sixth tenth	8	8	8	*	3
Seventh tenth	7	6	7	— 4	— 6
Eighth tenth	5	5	5	— 8	—30
Ninth tenth	3	3	3	— 6	—50
Bottom tenth	1	1	2	—35	—40

* Less than 0.5 percent.

a Income units: Canada: Unattached individuals and families which are defined as groups of individuals sharing a common dwelling unit and related by blood, marriage or adoption. Only non-farm units considered in this table.

U.S.: Spending units—all related persons living together who pool their incomes.

U.K.: Income units—all persons who live together, are related and pool their incomes.

b The figures for Canada were read from the Lorenz curve constructed from the data in Tables 1 and 2 of *Distribution of Non-Farm Incomes in Canada by Size, 1951*, Reference Paper No. 52, D.B.S., Ottawa. The Lorenz curve for the distribution of non-farm incomes in Canada reported in Tables 1 and 2 of *Distribution of Non-Farm Incomes in Canada by Size, 1954*, Reference Paper No. 66, D.B.S., Ottawa, did not differ substantially from that pertaining to incomes in 1951.

c Data from the Survey of Consumer Finances conducted by the Board of Governors of the Federal Reserve System in co-operation with the Survey Research Center of the University of Michigan and reported in *Federal Reserve Bulletin*, November 1950, p. 1442.

d H. F. Lydall, *British Incomes and Savings*, Oxford, 1955, Table 10, p. 25.

e Same source as cited in footnote c. The U.S. figures for saving in 1946, 1947 and 1948, reported in the same source, show much less concentration of positive saving in the upper tenths of spending units ranked by income than the 1949 figures shown in the table, and much less concentration of negative saving in the lower tenths.

f H. F. Lydall, *op. cit.*, Table 72, p. 144.

The figures for saving do not show the same degree of similarity. Saving figures in the table refer to the positive saving less the negative saving

performed by the "income units" in each successive group of 10 percent in the ranking of units by income. The general impression given by the data is that positive saving is concentrated in the upper income levels though more so in Britain than in the United States. Indeed the 1949 figures for the United States shown in the table show rather more concentration of positive saving in upper tenths of spending units and more concentration of negative saving in the lower tenths than do comparable United States figures for the three years preceding the 1949 recession. The reader is warned that there are some differences in the concepts underlying the data shown in the table as well as differences in the dates to which they pertain.

Let us consider now the financial assets and liabilities of consumers. We shall concentrate first on asset holdings especially the frequency of holding by income level and the distribution of holdings by income level and then turn to liabilities for debt.[8]

(ii) Financial assets

Turning first to liquid assets held by consumers, we present in Table 5.10 data for the United States, from the Survey of Consumer Finances conducted by the Federal Reserve Board. In this continuing survey, liquid assets are defined as "all types of U.S. Government bonds, checking accounts, savings accounts in banks, postal savings and shares in savings and loan associations and credit unions; currency is excluded". The data pertain to spending units defined, as we have noted earlier, as "all related persons living together who pool their incomes".

The frequency with which liquid assets were held in various income groups is shown in columns 3 and 4 for 1950 and 1956. About 7 units out of 10 held some liquid assets. Among units with incomes less than $1,000, over 4 out of 10 held some liquid assets. This frequency rises with income; at income levels of $7,500 and over, nearly all units held liquid assets. This direct variation of the frequency with income is depicted below in Chart 5.1.

The relative distribution of liquid asset holdings by income classes is shown in columns 5 and 6. In early 1956, when the proportion held by the lower income groups was lower than in 1950, somewhat more than one-third of total holdings by all units was held by those with incomes under $5,000. Units in this income range earned in 1955 almost exactly the same proportion of the income earned by all units, according to the figures shown in column 7.

8 Data on some aspects of the subjects now under review are available for the United Kingdom in H.F. Lydall, *British Incomes and Savings, op. cit.*

Table 5.10

PERCENTAGE OF SPENDING UNITS, PERCENTAGE OF SPENDING UNITS HAVING SOME LIQUID ASSETS, PERCENTAGE OF LIQUID ASSETS HELD AND PERCENTAGE OF INCOME RECEIVED IN EACH INCOME CLASS

United States

Income of previous year before taxes	Percent of spending units in each class		Percent of spending units in each class having some liquid assets		Percent of liquid assets held by spending units in each class		Percent of income held by spending units in each class
	Early 1950[a] (1)	Early 1956[b] (2)	Early 1950[c] (3)	Early 1956[d] (4)	Early 1950[e] (5)	Early 1956[f] (6)	1955[g] (7)
Under $1,000	14	11	44	42	6	5	1
$1,000- 1,999	19	12	54	48	9	6	4
2,000- 2,999	21	13	68	58	15	7	7
3,000- 3,999	19	14	74	71	15	9	10
4,000- 4,999	11	14	86	77	11	9	13
5,000- 7,499	11	22	94	89[h]	18	26	28
7,500 and over	5	14	99	98	26	38	37
All spending units or all liquid assets.	100	100	69	72	100	100	—

(a) *Federal Reserve Bulletin*, December 1950, p. 1608.
(b) *Federal Reserve Bulletin*, June 1956, p. 567.
(c) *Federal Reserve Bulletin*, December 1950, p. 1590.
(d) *Federal Reserve Bulletin*, July 1956, p. 703, also *Consumer Instalment Credit*, Part 1, Volume 1, p. 93.
(e) *Federal Reserve Bulletin*, December 1950, p. 1608.
(f) Estimated from Column 2 and figures of the percentage of total liquid assets held by each tenth of spending units in a ranking of spending units by income. These latter figures are shown in *Federal Reserve Bulletin*, June 1956, p. 572.
(g) *Federal Reserve Bulletin*, June 1956, p. 567. This column pertains to the results of the survey conducted early in 1956 concerning incomes earned in 1955.
(h) Estimated by the author.

It may be noted in passing that the 10 percent of spending units which earned the highest incomes in 1955 held one-third of all the liquid assets while the top 10 percent of units which had the highest liquid asset holdings early in 1956 held two-thirds of all liquid assets.[9]

In the survey of *non-farm* families conducted early in 1956 by the Dominion Bureau of Statistics[10] information was collected on the percentage of families or unattached individuals ("units") at each income level which held some liquid assets and on the distribution by income of the liquid assets held by such units. In this Canadian survey, liquid assets are defined rather differently than in the American Survey of Consumer Finances, to include "current accounts, savings accounts, other deposits,

9 See *Federal Reserve Bulletin*, June 1956, p. 572.
10 *Incomes, Liquid Assets and Indebtedness of Non-Farm Families in Canada, 1955*, Reference Paper No. 80, Dominion Bureau of Statistics, 1958.

Canada Savings Bonds, other Government of Canada bonds and all other bonds". In columns 2 of Table 5.11 and in Chart 5.1 the percentage of units having some liquid assets at different levels of income is shown for Canada and the United States. The reader is warned that the Canadian data pertain to non-farm families only and that liquid assets include *all* bond holdings. It would appear from this data that there may be a significantly larger proportion of non-farm families with some liquid assets in the lower income ranges in Canada than of spending units of all types in the United States.

In Table 5.11 distributions by income, of spending units, income received and liquid assets held, are also shown for both Canada and the United States. The average size of liquid asset holdings and the average

Table 5.11

PERCENTAGE OF UNITS, PERCENTAGE OF UNITS HAVING SOME LIQUID ASSETS, PERCENTAGE OF LIQUID ASSETS HELD AND PERCENTAGE OF INCOME RECEIVED IN EACH INCOME CLASS, CANADA AND THE UNITED STATES

<table>
<tr><th rowspan="2">Income</th><th colspan="2">Units[a]
(1)</th><th colspan="2">Units[a] having some liquid assets
(2)</th><th colspan="2">Liquid assets held[a]
(3)</th><th colspan="2">Income received[b]
(4)</th></tr>
<tr><th>Canada</th><th>U.S.</th><th>Canada</th><th>U.S.</th><th>Canada</th><th>U.S.</th><th>Canada</th><th>U.S.</th></tr>
<tr><td>Under $1,000</td><td>12</td><td>11</td><td>54</td><td>42</td><td>7</td><td>5</td><td>2</td><td>1</td></tr>
<tr><td>$1,000- 1,999</td><td>14</td><td>12</td><td>55</td><td>48</td><td>9</td><td>6</td><td>5.5</td><td>4</td></tr>
<tr><td>2,000- 2,999</td><td>18</td><td>13</td><td>64</td><td>58</td><td>12</td><td>7</td><td>11</td><td>7</td></tr>
<tr><td>3,000- 3,999</td><td>19</td><td>14</td><td>73</td><td>71</td><td>9</td><td>9</td><td>17</td><td>10</td></tr>
<tr><td>4,000- 4,999</td><td>15</td><td>14</td><td>79</td><td>77</td><td>15</td><td>9</td><td>17.5</td><td>13</td></tr>
<tr><td>5,000- 6,999</td><td>13</td><td rowspan="2">22</td><td>87</td><td rowspan="2">89</td><td>15</td><td rowspan="2">26</td><td>20</td><td rowspan="2">28</td></tr>
<tr><td>7,000- 7,499</td><td rowspan="2">6</td><td rowspan="2">90</td><td rowspan="2">15</td><td rowspan="2">13</td></tr>
<tr><td>7,500- 9,999</td><td>8</td><td>97</td><td rowspan="2">38</td><td>14</td></tr>
<tr><td>10,000 and over</td><td>3</td><td>6</td><td>94</td><td>99</td><td>18</td><td>14</td><td>23</td></tr>
<tr><td>Total</td><td>100%</td><td>100%</td><td></td><td></td><td>100%</td><td>100%</td><td>100%</td><td>100%</td></tr>
<tr><td>Average</td><td></td><td></td><td>72%</td><td>72%[c]</td><td>$1,525</td><td>$1,900[d]</td><td>$3,842</td><td>$4,650[e]</td></tr>
</table>

a Early 1956.
b 1955.
c *Federal Reserve Bulletin*, June 1956, p. 563.
d *Ibid.*, p. 564.
e *Ibid.*, p. 567.
SOURCES: U.S. data from Table 5.10.
Canadian data from *Incomes, Liquid Assets and Indebtedness of Non-Farm Families in Canada, 1955*, Reference Paper No. 80, Dominion Bureau of Statistics, 1958, Tables 1, 13 and 48.
See text for differences in definitions of spending units and liquid assets.

level of income were both higher in the United States than in Canada. In Canada, three-quarters of the units had incomes below $5,000 and these received half of the income and owned half of the liquid assets. In the United States about two-thirds of the spending units had incomes

below $5,000 and these received just over one-third of the income and held just over one-third of the liquid assets. A comparison of the income distribution of units with the income distribution of liquid assets is shown in Chart 5.2 for Canada and for the United States. From this chart it may be seen that the 75 percent of units with lowest incomes held slightly more than 51 percent of the liquid assets in Canada and 45 percent or 46 percent of the liquid assets in the United States. In Chart 5.3 the Lorenz curves based on Canadian data relating to income and to liquid assets are shown. The Lorenz curve for income permits a comparison of the distribution of units with the distribution of income, each distribution given by income size classes and each cumulated from low incomes. The curve for liquid assets permits a comparison of the distribution of units with the distribution of liquid assets, each distribution given by liquid assets size classes and each cumulated from low levels of liquid asset holdings. From this chart it is apparent that the distribution of income among units is much less unequal than the distribution of liquid assets. In particular while the 50 percent of the units with lowest incomes earned some 25 percent of the income earned by all units, the 50 percent of the units with lowest liquid asset holdings (including those with no holdings)[11] held about 2 percent of all the liquid assets held by all units.

In Table 5.12 several characteristics of the holding of liquid assets in Canada are shown and compared for total liquid assets, savings deposits in banks, other deposits and Canada Savings Bonds. Similar data are also shown for mortgage investments. The frequency data — the percent of the units at each income level which hold some of the assets — the holders' average holdings at each income level and the distribution of the total holdings by income level are all shown. The frequency data (column 1 in each panel) show that at each income level a far larger proportion of persons holds savings deposits in commercial banks than holds any other of the assets specified in the table. In the cases of savings deposits in banks, other deposits and Canada Savings Bonds the frequency of holding rises with income unitl the "$10,000 and over" level but falls off in this income class. With respect to marketable Government of Canada bonds, non-federal bonds of all types, and mortgage investments, the frequency of holdings in the "$10,000 and over" class is very much higher than in any other class. The distribution of amounts held by income classes (column 3 in each panel) shows a falling off in the proportions in the higher income groups in the cases of savings deposits, other deposits, Canada Savings Bonds, and mortgages but (though the patetrn is somewhat less regular) a building up of the proportions in the higher income groups in the cases of marketable federal bonds, and non-federal bonds. Whereas units in the "$10,000 and over" income bracket held a little over 10 percent of the savings deposits, these units held just under 50 percent of the non-federal bonds in the portfolios of non-farm families.

11 We would remind the reader that liquid assets are defined to exclude currency; thus one may hold no liquid assets and yet hold some currency according to this usage of the terms.

Table 5.12

DISTRIBUTIONS BY INCOME OF SELECTED CHARACTERISTICS OF THE HOLDING OF LIQUID ASSETS AND MORTGAGE INVESTMENTS BY FAMILIES AND UNATTACHED INDIVIDUALS, CANADA, EARLY 1956

Income level, 1955	All liquid assets			Savings deposits in banks			Other deposits			Canada Savings Bonds			Other Govt. of Canada bonds			Non-federal bonds other bonds			Mortgage investments		
	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %
Under $1,000....	54.2	1,741	7.0	40.7	1,247	7.8	3.9	672	5.7	13.3	1,571	5.9	4.9	99	4.5	2.5	3,740	9.5	4.4	3,611	4.4
$1 000-1,999.....	55.4	1,876	9.2	45.3	937	8.6	3.4	836	6.5	15.4	2,653	12.9	4.9	1,527	8.3	3.3	1,437	5.9	4.7	5,482	8.4
2,000-2,999.....	64.0	1,228	12.0	48.3	1,147	14.6	8.1	426	10.6	14.2	1,810	10.9	5.6	1,603	12.1	1.0	2,244	3.4	3.6	5,668	9.3
3,000-3,999.....	72.9	1,082	9.4	55.0	694	10.8	8.8	506	15.0	20.5	1,092	9.2	3.4	1,041	5.2	1.7	822	2.3	4.8	5,403	11.4
4,000-4,999.....	79.2	1,845	14.6	60.9	1,139	15.7	11.0	1,044	30.4	26.1	1,756	16.5	4.7	1,493	8.1	2.7	1,787	6.1	4.8	8,385	17.3
5,000-6,999.....	86.7	1,942	14.8	71.8	1,110	15.9	8.8	868	17.7	31.7	1,367	13.3	6.2	2,706	17.0	3.4	2,448	9.1	6.7	7,905	21.0
7,000-9,999.....	89.7	4,133	14.6	77.9	2,293	15.8	12.6	573	7.8	46.1	2,524	16.4	9.5	1,910	8.4	6.6	4,345	14.6	7.3	11 559	11.3
10,000 and over.	93.7	9,558	18.4	71.6	3,031	10.8	11.9	1,092	6.3	36.2	6,323	15.0	18.3	8,463	36.4	11.6	15,846	49.1	17.7	17,590	16.8
All units......	71.7	2,128	100.0	56.3	1,206	100.0	98.3	686	100.0	22.6	1,923	100.0	5.6	2,282	100.0	2.9	4,119	100.0	5.3	7,774	100.0

(1) Percent of units holding some of the asset.
(2) Average size of holding (holders only).
(3) Distribution of holdings.

SOURCE: Some of the distributions in this table have been published in *Income, Liquid Assets and Indebtedness of Non-Farm Families in Canada, 1955*. Reference Paper No. 80, Dominion Bureau of Statistics, Ottawa 1958; others were kindly supplied by DBS from the work sheets underlying this publication.

Let us now consider holdings of corporate stock. We shall discuss traded or marketable stock first. The Canadian survey, referred to above, obtained information on the frequency of stockholding, that is the proportion of families and unattached individuals holding some stocks "which are publicly traded (on the stock exchanges or as unlisted stocks)". These data pertain to non-farm families. The Survey of Consumer Finances in the United States which covers farm as well as non-farm spending units also collects information from time to time on "traded stock" by which is meant "common and preferred stock in corporations open to investment by the general public". These data on the frequency of stockholding are given in Table 5.13. From these data it appears that some 8 percent or 9 percent of the units in Canada and in the United States held some

Table 5.13

PERCENTAGE OF UNITS OWNING SOME MARKETABLE STOCK

Income level in previous year	Canada early 1956	United States early 1955
Under $1,000	3	
$1,000- 1,999	5	4
2,000- 2,999	3	
3,000- 3,999	5	
4,000- 4,999	8	5
5,000- 6,999	14	
7,000- 7,499		9
7,500- 9,999	28	16
10,000 and over	51	35
All spending units	9	8

SOURCES: Canada: Reference Paper No. 80, Dominion Bureau of Statistics, Table 26.
United States: *Federal Reserve Bulletin*, June 1955, p. 622.

stock. It further appears that while the percentages were of the same order of magnitude in the two countries at incomes less than $5,000, for higher incomes, the proportion of units which held some stock was significantly larger in Canada than in the United States. This may be related to the wide interest in mining and oil stocks and the absence of a tax on capital gains and special dividend tax credits in Canada, but we do not put forward these suggestions as a full explanation of this feature of the data. In both countries the frequency of stock ownership rose with income at an increasing rate while the frequency of liquid asset ownership, greater than that of stock holding at all income levels, rose with income at a decreasing rate. United States data for early 1950 show that of those spending units which owned no liquid assets only 1 percent held any "traded stock" while of the spending units with liquid assets amounting to $5,000 or more, about 30 percent held some stock.[12]

[12] See *Federal Reserve Bulletin*, December 1950, p. 1601.

In a study of individual ownership of financial assets, based on income tax returns filed in the State of Wisconsin for the year 1949,[13] it is estimated that some 5 percent of individuals with incomes under $5,000 held some "traded stock", 10 percent with incomes between $5,000 and $10,000 held some and about 46 percent of those with incomes of $10,000 or over held some. Overall it is estimated that about 6.5 percent of "income units" held some "traded stock". "Traded stock" in this study refers to issues for which price and dividend information could be obtained from investment manuals. The frequency of ownership in the "$10,000 and over" class is rather higher in the Wisconsin study than in the results of the Survey of Consumer Finances, but is still somewhat lower than is estimated for Canadian non-farm families.

What percentage of the value of "traded stocks" held by individuals or spending units is held by units at various income levels? Our information on this question is scanty and uncertain. We have none for Canada. For the United States, sources are the Survey of Consumer Finances, *The Pattern of Financial Asset Ownership, Wisconsin Individuals, 1949 and Effects of Taxation; Investments by Individuals*".[14] Results from these three United States sources have been compared in the study based on Wisconsin data and we quote in full the table containing the comparisons as our Table 5.14. The table illustrates the extent of ignorance on this subject; we can have some assurance that the figures 20 percent and 50 percent include the proportion of traded stock in the hands of "spending units" that is held by units with incomes below $10,000, but this is a very wide range!

Information on holdings of untraded stock is even scantier than that for traded stock. We have no direct data for Canada. The study based on Wisconsin income tax returns, to which we have already alluded provides some for the United States. It is there estimated that some 4.2 percent of "income units" held some untraded stock. The proportion of income units that held some stock is lower at each income level for untraded stock than for traded stock according to this study, though in each case this frequency rises with income.[15] It is further estimated in this study that whereas 48 percent of the traded stock held by individuals was held in 1949 by those with incomes less than $10,000 only 37 percent of the untraded stock held by individuals was held by those in the same income bracket. Approximately one-third of untraded stock held by individuals was thought to be held by those with incomes of $50,000 or over, while only one-sixth of traded stock in the hands of individuals was held by those in this high range of income.[16]

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13 Thomas R. Atkinson, *The Pattern of Financial Asset Ownership, Wisconsin Individuals, 1949*, National Bureau of Economic Research, Princeton, 1956, especially p. 63 Chart 1.

14 By J. Keith Butters, Lawrence E. Thompson and Lynn L. Bollinger, Harvard University, 1953.

15 Thomas R. Atkinson, *The Pattern of Financial Asset Ownership, Wisconsin Individuals, 1949*, *op. cit.*, pp. 61 and 63.

16 *Ibid.*, Table A-3, p. 143.

Table 5.14

ESTIMATED DISTRIBUTION OF THE VALUE OF TRADED OR MARKETABLE STOCKS BY INCOME GROUP

Income of Holder	Three Surveys Compared			Survey of Consumer Finances[c] (1952)
	Wisconsin sample[a] (1949)	Harvard study[b] (1949)		
		A	B	
Under $10,000	48%	30%	25%	20%
$10,000-49,999	36	37	39	80
50,000 and over	16	33	36	
Total	100%	100%	100%	100%

a Computed from Table A-3 (of reference cited below as "source").

b From *Effects of Taxation: Investments by Individuals*, by J. Keith Butters, Lawrence E. Thompson, and Lynn L. Bollinger (Harvard University) 1953, Table XVII-7, p. 438. The authors consider estimate A as a minimum estimate for concentration of marketable stock holdings in the income range of $10,000 and over, and estimate B as the more probable.

c From "Stock Ownership among American Families", by George Katona, John B. Lansing, and Peter E. de Janosi, *Michigan Business Review*, January 1953, p. 16.

SOURCE: This table and notes appear as Table 14 on p. 77 of *The Pattern of Financial Asset Ownership, Wisconsin Individuals, 1949*, by Thomas R. Atkinson, National Bureau of Economic Research, Princeton, 1956.

While we have no direct data for Canada to compare with this, we do have data on dividends declared (pertaining to all stock, traded and untraded) on income tax returns by Wisconsin taxpayers and Canadian taxpayers. Unfortunately no very specific conclusions may be drawn from such a comparison. Of the dividends declared, the Canadian data show a rather larger proportion declared by those with incomes below $10,000 and a rather smaller proportion declared by those with incomes of $20,000 or more than do the Wisconsin data. The comparison is made in Table 5.15 in which the distribution of dividends declared by income level is shown for Wisconsin for 1949 and for Canada for 1950 and 1954. The estimates of all stock held by Wisconsin individuals by income classes is also shown and this distribution closely resembles that of dividends declared. (Dividends declared were an integral part of the information used in the Wisconsin study in estimating stockholdings.)

The general impression left with one after studying such data as is available on the holding of stock by individual investors, is that the ownership of stock, and especially untraded stock, is concentrated in the very high income groups. The frequency of ownership is much higher in the higher income groups; the proportion of income assessed for tax purposes that derives from dividends is about 25 percent for incomes of $50,000 and over but does not rise above 4 percent for incomes below $10,000;[17] of individuals' holding of stock perhaps one-third of untraded

17 Data are for Canada in 1954 and derive from *Taxation Statistics 1956*, Queen's Printer, Ottawa.

Table 5.15

DISTRIBUTIONS OF STOCKHOLDINGS (WISCONSIN) AND DIVIDENDS DECLARED (WISCONSIN AND CANADA) ON INCOME TAX RETURNS, BY INCOME LEVEL

Income level	Stockholdings	Dividends declared		
	Wisconsin 1949[a]	Wisconsin 1949[b]	Canada 1950[c]	Canada 1954[d]
Under $ 5,000	23	23	33	25
$ 5,000- 9,999	17	15	16	18
10,000- 19,999	16	16	18	17
20,000- 49,999	22	22	18	23
50,000 and over	22	24	15	17
Total	100	100	100	100

a Thomas R. Atkinson, *The Pattern of Financial Asset Ownership, Wisconsin Individuals, 1949*, *op. cit.*, Table A-3, p. 143.

b *Ibid*, Table A-1, p. 141.

c *Taxation Statistics 1952*, Queen's Printer, Ottawa.

d *Taxation Statistics 1956*, Queen's Printer, Ottawa.

stock and one-sixth of traded stock is held by those with incomes over $50,000 a year[18] and these individuals or "income units" comprise considerably less than 1 percent of all "income units". A very large proportion of spending units which hold stock, hold stock in only one corporation. Thus "the 1949 Survey of Consumer Finances, for example, found that 'roughly half of the spending units who reported owning (publicly traded) stock stated that they had invested in only one corporation; approximately one-third held stock in from two to ten corporations; and less than one-tenth owned shares in 11 or more corporations'. In comparison, the Wisconsin data show that 38 percent of the tax filers reporting ownership of traded stock held only one issue, almost half held 2 to 10 issues, and about 12 percent held more than 10 issues".[19] According to the Wisconsin study the average number of issues held increases with income and with the average size of stockholdings. (p. 139.)

It is reported in the Wisconsin study that "about two-thirds of the value of untraded stockholdings but only about one-tenth of the value of traded stocks, represent issues of corporations from which individuals also receive wage or salary income" (p. 106) so that especially in the case of untraded stock, association with the corporation as executive or employee may be an important determinant of stock ownership.

The Wisconsin study also discloses that preferred shares are much more important in the holdings of those with lower incomes than of those

18 These are Wisconsin data cited earlier.

19 Thomas R. Atkinson, *The Pattern of Financial Asset Ownership op. cit.*, pp. 126-7. The reference to the results of the 1949 Survey of Consumer Finances is to the *Federal Reserve Bulletin*, October 1949, p. 1191. The reader will note that the Survey data pertain to *corporations*, while the Wisconsin results pertain to issues. In the study by Lewis H. Kimmel, *Share Ownership in the United States* (The Brookings Institution, 1952) undertaken at the request of the New York Stock Exchange, it is reported that slightly under one-half of all shareholders owned only one issue of stock in early 1952. (p. 110.) See also Butters, Thompson and Bollinger, *Effects of Taxation: Investments by Individuals, op. cit.*, p. 378.

with higher incomes, and that the lower income holders of traded securities hold a larger proportion of their traded stocks in issues of corporations in industries commonly regarded as supplying conservative investments.

We have reviewed scattered data on the frequency of ownership of financial assets by income level and on the distributions of holdings by income level. It is of some interest in the present context to consider the portfolios, the composition of financial assets, by income level. Unfortunately, at this point we run almost completely out of data. Some data from the Survey of Consumer Finances may be found for the early 1950's, when attempts were made to estimate consumers' net worth from the survey data. Data for a sample of "active investors" (those whose names were in the files of investment dealers) may be found in the volume *Effects of Taxation: Investments by Individuals.*[20] There are also data in the Wisconsin survey which are reproduced here as Table 5.16. Unfortunately these data exclude currency, deposits in current accounts and United States government bonds. This table confirms the impression garnered from a variety of sources that the concentration of financial assets in liquid, safe

Table 5.16

COMPOSITION OF FINANCIAL ASSET HOLDINGS FOR INCOME GROUPS OF WISCONSIN INDIVIDUALS, 1949

Income	Time deposits and related claims[a]	Direct debt assets[b]	Traded stock	Untraded stock	Total[ab]
$ 0 -$ 4,999	47	23	23	7	100
5,000- 9,999	26	20	36	18	100
10,000- 19,999	11	17	45	27	100
20,000- 49,999	5	10	46	39	100
50,000 and over	1	6	40	53	100
All income groups	24.5	17.0	35.4	23.1	100.0

a Excludes currency and deposits in current accounts.
b Excludes United States government bonds.

SOURCE: Thomas R. Atkinson, *The Pattern of Financial Asset Ownership, Wisconsin Individuals, 1949, op. cit.* Tables 8 and 11, pp. 69 and 70.

assets diminishes with rising incomes. Undoubtedly a very large proportion — 50 percent or more — of the financial assets held by Canadians having incomes less than $5,000 (which includes the average income of families and unattached individuals) are held in cash or near-cash assets such as bank accounts and Canada Savings Bonds.

We have been examining information that is available on financial assets in the consumer sector by income level. We have considered especially the frequency of holdings by income level, and the distribution of holdings by income level. We turn now to liabilities.

20 By J. Keith Butters, Lawrence E. Thompson and Lynn L. Bollinger, Harvard University, 1953, Table A-13, p. 468.

(iii) Financial liabilities

In Table 5.17 we show data for Canada and the United States on the frequency of liability for non-mortgage debt by income level as of early 1956. The data are not precisely comparable inasmuch as the Canadian figures include charge accounts and some business debt which cannot be separated from personal debt while the American figures exclude charge accounts and business debt. The Canadian figures pertain to non-farm families and unattached individuals (units) and the American figures cover non-farm and farm spending units. In both the Canadian and American figures, the proportion of spending units with some liability for "personal debt" rose with income to about the five to seven thousand dollar level and thereafter declined. The Canadian frequencies were lower than the American in the lower income groups and higher in the higher income groups, but for all units together the frequency of personal debt liability was about the same in the two countries at 50 percent to 55 percent.

Table 5.17

PROPORTION OF SPENDING UNITS AT VARIOUS INCOME LEVELS HAVING SOME PERSONAL DEBT APART FROM MORTGAGES

Canada and the United States, early 1956

Income in 1955	Canada	United States
Under $1,000	22	35
$1,000- 1,999	37	46
2,000- 2,999	51	58
3,000- 3,999	63	57
4,000- 4,999	63	64
5,000- 6,999	64	62
7,000- 7,499	62	
7,500- 9,999		54
10,000 and over	52	43
All spending units	53	54

NOTES: The Canadian figures exclude mortgage debt but include charge accounts; The United States figures exclude both mortgages and charge accounts.

The Canadian figures include some business debt that could not be separated from personal debt; the U.S. figures purport to exclude all business debt.

The Canadian figures are from Reference Paper No. 80, Dominion Bureau of Statistics, 1957, Table 31, and cover non-farm families and unattached individuals.

The U.S. figures are from *Federal Reserve Bulletin*, July 1956, p. 701 and cover farm and non-farm spending units.

Mortgage debt holding among home-owning non-farm families in Canada and the United States in early 1956 is shown in Table 5.18. In both Canada and the United States the proportion of home-owning families having some mortgage debt rose with income in the lower income brackets and thereafter declined. The maximum proportions were about the same, two-thirds in each country, though the maximum was reached in the four to five thousand dollar bracket in Canada and the seven thousand

Table 5.18

PROPORTION OF HOME-OWNING, NON-FARM FAMILIES AND UNATTACHED INDIVIDUALS HAVING SOME MORTGAGE DEBT,

Canada and the United States, early 1956

Income in 1955	Canada	United States
Under $1,000	14	10
$1,000- 1,999	21	18
2,000- 2,999	30	32
3,000- 3,999	56	43
4,000- 4,999	64	55
5,000- 6,999	60	64
7,000- 7,499 7,500- 9,999	58	67
10,000 and over	55	58
All	47	50

Sources: Canada: Dominion Bureau of Statistics, *Income, Liquid Assets and Indebtedness of Non-Farm Families in Canada, 1955*, Reference Paper No. 80, 1958, Table 42.
United States: *Federal Reserve Bulletin*, August 1956, p. 822.

five hundred to ten thousand dollar bracket in the United States. Overall, the proportion was perhaps somewhat lower in Canada than in the United States, though in both countries approximately half of the home-owning families had some mortgage debt in the early part of 1956.

The distributions by income of selected characteristics of indebtedness and of liquid asset holdings for non-farm families in Canada as of early 1956 are shown in Table 5.19. It will be noted that the proportion of indebted units in each income class rose with income for the first several brackets of income for each of the several classes of debt depicted. The maximum of such percentages was reached at incomes above $5,000 for each class of debt shown, except for instalment debt; in this case the maximum was reached in the income class three to four thousand dollars. In each income class there was a significantly smaller proportion of units indebted to the banks than was liable for instalment debt; indeed, overall, about three times as many units were liable for instalment debt as were indebted to the banks. The proportion of units liable for bank debt was higher in each successive income class. While overall about three-fifths of the units were liable for some debt, a little less than one-third was liable for instalment debt and about one-tenth had some bank debt.

In round numbers, one-quarter of the total debt was held by units with incomes of seven thousand dollars or more. In the case of bank debt, however, well over one-half, nearly three-fifths, was held by units in this higher income bracket. By contrast less than one-fifth of instalment debt was held by these high-income units.

Table 5.19

DISTRIBUTION BY INCOME OF SELECTED CHARACTERISTICS OF INDEBTEDNESS AND OF LIQUID ASSET HOLDINGS, CANADA, EARLY 1956

Income level 1955	Liquid assets			Total debt			Personal debt			Consumers debt			Bank debt			Instalment debt		
	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %	(1) %	(2) $	(3) %
Under $1,000........	54.2	1,741	7.0	25.0	1,107	1.7	22.4	335	1.9	17.2	265	1.6	2.0	412	.6	10.1	299	2.3
$1,000- 1,999........	55.4	1,876	9.2	39.2	811	2.8	37.3	447	6.1	32.7	320	5.3	2.5	672	2.1	16.5	320	5.5
2,000- 2,999........	64.0	1,228	12.0	56.5	1,213	8.0	51.3	527	13.7	48.7	442	13.6	8.4	570	8.3	28.7	339	12.5
3,000- 3,999........	72.9	1,082	9.4	71.9	2,293	19.0	62.8	625	18.2	58.3	518	19.7	10.7	610	10.5	40.4	390	21.6
4,000- 4,999........	79.2	1,845	14.6	73.1	3,399	22.8	63.0	686	15.8	58.1	571	17.2	10.7	858	11.7	37.2	459	18.6
5,000- 6,999........	86.7	1,942	14.8	74.0	3,787	22.5	63.8	907	18.1	59.7	714	19.1	15.6	702	16.4	38.7	582	21.4
7,000- 9,999........	89.7	4,133	14.6	77.2	4,304	12.2	62.0	1,146	10.6	58.5	838	10.2	18.3	1,426	14.2	35.7	632	9.9
10,000 and over......	93.7	9,558	18.4	69.0	8,977	11.0	51.7	4,882	16.5	46.1	3,234	13.3	21.5	8,279	36.1	25.7	1,259	8.2
All units........	71.7	2,128	100.0	60.5	2,782	100.0	52.8	786	100.0	48.6	619	100.0	9.8	1,264	100.0	30.5	461	100.0

(1) Percent of the units holding some liquid assets or having some debt.
(2) Average size of holding or debt (holders or debtors only).
(3) Distribution of holdings or debt.

Note: Consumer debt consists of charge accounts and budget accounts with stores, instalment debt, debts to small loan companies and credit unions, and unsecured bank loans. Personal debt consists of consumer debt, secured bank loans, policy loans from life insurance companies and all other debts except mortgage debt. Total debt is personal debt plus mortgage debt. Bank debt consists of loans from chartered banks both secured and unsecured.

SOURCE: Some of the distributions in this table have been published in *Incomes, Liquid Assets and Indebtedness of Non-Farm Families in Canada, 1955*, DBS Reference Paper No. 80. Others were supplied by DBS from the worksheets underlying this publication.

Further information on the relationship between the holding of liquid assets and the liability for consumer debt is given in Table 5.20.[21] In this table it is shown that for all units together, 51.5 percent had no consumer debt, and of those, the vast majority had some liquid assets. Of the 48.5 percent of all units with some consumer debt, just under one-third had liquid assets greater than their consumer debts, just over two-thirds had no liquid assets or liquid assets valued at not more than the amount of their consumer debt. At progressively higher income levels, among those with some consumer debt, the proportion whose liquid assets (if any) were of a value no greater than that of their consumer debt fell sharply. Thus, in the "under $1,000" income class there were about four times as many units whose liquid assets did not exceed their consumer debt in value, as units whose liquid assets were of greater value than their consumer debt. By contrast, in the "$10,000 and over" class, there were about as many units whose consumer debt exceeded their liquid assets as other units having some consumer debt.

On instalment indebtedness there is a massive amount of material available for the United States, and much of it is summarized in the Federal Reserve Board study entitled *Consumer Instalment Credit*.[22] We have already shown, in Table 5.19, data from the Canadian survey in 1956 on instalment debt. In Table 5.21 we contrast some information on the incidence of instalment debt in Canada and the United States. The contrasts exhibited in this table, with one exception, are not sharp. In Canada, 78 percent of all units had incomes below $5,000 and 71 percent of indebted units had incomes in this range, whereas in the United States, the comparable figures are 64 percent and 59 percent. However, in all income brackets, the proportion of indebted units among all units was higher in the United States than in Canada, the over-all proportions being 45 percent for the United States and 31 percent for Canada. In the last panel of the table is information available for the United States only on the ratio of annual payments on account of instalment debt to the disposable income of indebted units. This ratio, which averaged over 16 percent for all indebted units, varied inversely with income level.

We have reviewed some of the available data on the frequency of financial liabilities and on the distributions of such liabilities by income level. It would help to round out our picture if we could also present data on the composition of indebtedness by income level. But data of this kind are not available for Canada. Later, when we discuss the regulators of the flows of funds we shall refer again to some of these data; we turn now to a review of selected facts about institutions specializing in consumer finance.

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21 Roughly comparable data showing the relation of personal debt to liquid asset holdings within income groups in the United States, in early 1956, is presented in the *Federal Reserve Bulletin*, July 1956, p. 703.

22 Published in 1957.

Table 5.20

CONSUMER DEBT—LIQUID ASSET RELATION WITHIN INCOME GROUPS, CANADA, EARLY 1956

(Percent distribution of units)

Relation	All families and unattached individuals	1955 Money income before taxes							
		Under $1,000	$1,000-1,999	$2,000-2,999	$3,000-3,999	$4,000-4,999	$5,000-6,999	$7,000-9,999	$10,000 and over
Some consumer debt	48.5	16.9	32.7	48.7	58.4	58.1	59.7	58.3	46.1
Liquid assets greater than consumer debt	15.3	3.4	4.9	10.0	16.9	19.4	24.1	29.3	23.5
Liquid assets less than or equal to consumer debt	17.3	3.0	7.0	16.8	21.3	23.1	24.7	19.8	19.4
No liquid assets	15.9	10.5	20.8	21.9	20.2	15.6	10.9	9.4	3.2
No consumer debt	51.5	83.1	67.3	51.4	41.7	41.9	40.3	41.6	53.9
Some liquid assets	39.4	47.8	43.5	37.2	34.8	36.7	38.0	40.6	50.7
No liquid assets	12.1	35.3	23.8	14.2	6.9	5.2	2.3	1.0	3.2
All units	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: *Incomes, Liquid Assets and Indebtedness of Non-Farm Families in Canada, 1955*, DBS Reference Paper No. 80, Table 44.

Table 5.21

CONSUMER INCOME AND INSTALMENT INDEBTEDNESS, EARLY 1956 CANADA AND THE UNITED STATES

Income before taxes 1955	A		B		C		D		E
	Percentage distribution of units				Indebted units as a percent of all units in income group		Indebted units as a percent of all units		Average annual payment on instalment debt as a percent of disposable income for indebted units
	All units		Indebted units						
	Canada (1)	United States (4)	Canada (2)	United States (4)	Canada (3)	United States (4)	Canada (2)	United States (5)	United States (6)
Under $1,000	12	11	4	5	10	20	1	2	29.0
$1,000- 1,999	14	12	8	9	17	34	2	4	19.2
2,000- 2,999	18	13	16	13	29	45	[illegible]	6	18.7
3,000- 3,999	19	14	25	15	40	49	8	7	16.2
4,000- 4,999	15	14	18	17	37	56	6	8	17.2
5,000- 6,999	13		20		39		6		
7,000- 7,499		22		28		56		12	13.7
7,500- 9,999	6	8	7	8	36	48	2	4	13.0
10,000 and over	3	6	3	5	26	32	1	2	11.0
All income groups	100	100	100	100	31	45	31	45	16.4

SOURCES: (1) DBS Reference Paper No. 80, Table 1.
(2) Computed from Canadian data in parts A and C of the table.
(3) DBS Reference Paper No. 80, Table 40.
(4) Board of Governors, Federal Reserve System, *Consumer Instalment Credit*, Part I, Vol. I, p. 90.
(5) *Ibid.*, Part I, Vol. I, p. 201.
(6) *Ibid.*, Part II, Vol. I, p. 137.

2. *Institutions specializing in consumer finance*

In this section of the chapter we shall consider the more important institutions which specialize in supplying non-mortgage credit to consumers. It will be seen from the estimates shown in Table 5.22 that chartered banks, instalment finance companies and retail dealers are the most important suppliers of non-mortgage credit to consumers as judged by the volume of credit outstanding in the 1953 to 1954 period. Outstanding policy loans from insurance companies at $235 million were slightly more than one-third of the outstanding instalment credit extended by sales finance companies. Small loan companies and licensed money lenders had loans outstanding amounting to some $200 million and credit union non-mortgage loans amounted to about $140 million. We shall treat the banks and insurance companies in a broader context in later chapters; in this chapter we shall limit our discussions to the instalment finance companies, the small loan companies and the credit unions. Inasmuch as the outstanding credit attributable to instalment finance companies is twice that attributable to money lenders and credit unions combined, the finance companies will receive the most attention.

a. Instalment finance companies

There are in Canada perhaps one hundred and fifty or more instalment finance companies but of these the six largest hold over 90 percent of the outstanding retail paper held by all instalment finance companies. Three of the six largest companies are subsidiaries of United States companies.

The instalment finance companies, as financial intermediaries, raise money through the issue of securities — notes, debentures, preferred and common shares — and lend the funds so raised largely to buyers of goods at retail, but also to a lesser extent to buyers of such goods at wholesale. We shall consider in succession these two aspects of the companies' activity, the raising of money and the lending of money.

The instalment finance companies are in the business of supplying funds to the buyers of durable goods. The accommodation they furnish to such buyers is for a relatively short period, almost always under three years. The most important need for accommodation from the finance companies has been for funds to finance the purchase of automobiles though the financing of purchases of household durables of one kind and another is growing in relative importance. The demand for these durables and hence for financial accommodation has shown decided fluctuations both of a seasonal and cyclical variety. The relatively short duration of the finance companies' instalment credit contracts together with the variation in the total demand for their funds imply that the companies will seek to obtain their finance mainly through short-term borrowing rather than equity financing

Table 5.22

MAJOR SOURCES OF NON-MORTGAGE CREDIT TO CONSUMERS

	Average amounts outstanding (millions) 1945-46	Average amounts outstanding (millions) 1953-54	Column (2) divided by Column (1)
	(1)	(2)	(3)
Instalment finance companies	29	671	23.0
Chartered banks—Cash loans	98	274	3.0
—Secured loans	190	317	1.7
Total[a]	288	591	2.0
Retail dealers —Charge accounts	88	351	4.0
—Instalment credit	55	303	5.5
Total	143	654	4.5
Insurance companies—Policy loans	150	235	1.5
Small loan companies and licensed money lenders	31	200	6.0
Credit unions	28	140	5.0

a Ex. loans to finance Canada Savings Bonds.

SOURCE: The figures in this table have been derived from published sources or from worksheets underlying the National Transactions Accounts.

In Table 5.23 we show the changes in liabilities accumulated over the years 1946 to 1954 and the outstanding liabilities at the end of 1954 for the companies operating in Canada. These figures do not show a breakdown of "notes and debentures" by maturity of the debt; they do however indicate how very heavy is the reliance on debt financing by these companies. In the period covered by the National Transactions Accounts, the main source of funds was clearly notes and debentures, bank loans ranked next and stock and retained earnings next in that order. Inasmuch as perhaps one-third of the book value of the outstanding shares of the Canadian companies represents preferred shares, it may be seen that the leverage ratio — the ratio of debt and preferred shares to common shares, or common shares and earned surplus — is very high for these companies. The situation in Canada in this respect is similar to that in the United States. For the United States it has been reported that "six-sevenths of the 1945-1955 expansion in total assets of the companies was financed through increased borrowing from other lenders. A number of instalment finance companies issued preferred and common stock during this period and all obtained funds through retained earnings, but the additional resources provided through these channels were small relative to their total borrowing, even for medium and smaller-size companies".[23]

23 "Financial Characteristics of Principal Consumer Lenders", *Consumer Instalment Credit*, Board of Governors of the Federal Reserve, September 1957, Part I, Vol. 2, p. 7.

Table 5.23

LIABILITIES OF INSTALMENT FINANCE COMPANIES IN CANADA

	Amounts outstanding end of 1954		Accumulation of changes 1946-54	
	Millions[a] of dollars	%	Millions[b] of dollars	%
Notes and debentures	435	53	435	54
Bank loans	160	20	155	19
Capital stock	70	9	50	7
Reserves and earned surplus	40	5	40	5
Other[c]	115	13	120	15
Total	820	100	800	100

a From worksheets underlying estimates for National Transactions Accounts. Dollar figures rounded to even five millions.

b From Part VI below.

c Includes reserve for unearned service charges, dealers' credit balances, accrued interest dividends, rents and taxes and miscellaneous payables.

It may also be inferred from Table 5.23 that there has been a very considerable expansion in the degree of leverage in these companies since 1945, inasmuch as notes and debentures have increased from $2 million to $436 million while stock (common and preferred) outstanding has increased from $7 million to $120 million. A similar development in the post-war years has also been noted in the United States.[24]

While bank loans have been an important proportion of the liabilities of the companies throughout the post-war period, they were especially important in 1946 at the beginning of the post-war expansion and again in 1952 in the expansion that followed the removal of credit restrictions. In Table 5.24 the course of bank loans, and notes and debentures outstanding over the years 1946-54 is shown. On the whole the ratio of bank loans outstanding to notes and debentures outstanding has declined over the period. There is some difference among the companies in the degree of reliance on bank loans; smaller companies in particular rely to a greater extent on the banks than do the larger companies but even among the larger companies the practices differ.

During the post-war period in Canada, the larger companies in particular have developed a market outside of the banks for short-term secured or collateral trust notes with maturities of less than one year.[25] These notes are sold to life companies, other financial institutions and to

24 "Financial Characteristics of Principal Consumer Lenders", *op. cit.*, p. 7.

25 The market for these securities has been developed in the sense that parties have been induced to buy them; there is not, however, any trading of outstanding issues of these securities among original buyers and others.

Table 5.24

BANK LOANS AND NOTES AND DEBENTURES OF FINANCE COMPANIES IN CANADA 1946-54

End of Year	Outstanding[a]			Increases in amounts outstanding[b]	
	Bank loans	Notes and debentures	Ratio	Bank loans	Notes and debentures
1946	32	8	4.0	26	6
1947	63	45	1.4	31	37
1948	60	64	.9	— 3	19
1949	76	98	.8	16	34
1950	117	178	.65	41	80
1951	70	288	.2	—47	110
1952	191	327	.6	122	39
1953	217	452	.5	25	124
1954	160	436	.4	—56	—16

a From worksheets underlying estimates for National Transactions Accounts.
b From Part VI below. Computed from unrounded data.

corporations.[26] They are usually issued in denominations of $50,000 or more and are available in one or more of the following maturities: 30-89 days; 90-179 days; 180-269 days; 270-364 days or one year. The maturity is often fixed to suit the particular buyer. They are usually placed through brokers though not always; General Motors Acceptance Corporation, for example, apparently makes a practice of issuing them directly to buyers, as does its parent company in the United States. The use of these notes is confined to about fifteen of the larger companies.[27]

The course of outstanding bank loans and outstanding short-term notes for six of the largest instalment finance companies operating in Canada over the years 1945 to 1954 is shown in Table 5.25. This table depicts clearly the dramatic growth in the importance of the short-term note as an instrument of finance for these larger companies.

The longer term debt issued by the companies takes the form of secured notes maturing in five to fifteen years or sometimes longer, and unsecured sinking fund debentures maturing in ten to twenty years, backed by a general claim on the assets of the company. While for reasons given above, the instalment finance companies find it more comfortable not to be saddled with relatively large amounts of long-term debt, especially amounts greater than they can keep continuously employed, call provisions

26 Usually these notes are secured in the same way as loans to banks frequently are, namely by the issuer's undertaking to deposit with the trustee acceptable collateral consisting of receivables purchased by the company in the ordinary course of business and being a total value of at least 112.5 percent of the aggregate principal amount of all such rates issued and outstanding. This figure of 112.5 percent has not apparently been a flexible one over time in Canada. The writer has verified that in the case of one company — Industrial Acceptance Corporation — this percentage has not been changed since 1947.

27 A very detailed account of the market for the short-term obligations of sales finance companies in the United States may be found in Donald P. Jacobs, "Sources and Costs of Funds of Large Sales Finance Companies" in *Consumer Instalment Credit*, Board of Governors of Federal Reserve System, 1957, Part II, Vol. I, esp. pp. 353-79.

Table 5.25

OUTSTANDING BANK LOANS AND SHORT-TERM NOTES OF SIX OF THE LARGEST INSTALMENT FINANCE COMPANIES IN CANADA

(millions of dollars)

Year	Demand bank loans	Short-term notes
1945	4.6	—
1946	29.9	3.0
1947	53.9	13.7
1948	49.3	13.6
1949	65.0	20.1
1950	92.3	53.6
1951	47.6	142.2
1952	170.6	187.0
1953	172.3	218.7
1954	92.8	157.9

SOURCE: The four largest companies operating in Canada very kindly made their unconsolidated balance sheets available to the Commission. These figures are derived from these balance sheets and from published balance sheets of two of the other large companies, adjusted where necessary using published information relating to subsidiaries. It should be noted that some short-term notes are sold to banks and in the case of one or two companies there is some uncertainty as to how to distinguish demand bank loans and short-term notes.

customarily have been included in these debt contracts which, subject to a penalty, permit the issuer to retire the debt before maturity. Moreover, the sinking fund provisions of the debenture issues automatically provide for retirement at a specified rate such as 2½ percent to 5 percent of the issue each year. The call provisions and the sinking fund provisions have not been wholly inflexible as is illustrated in Table 5.26 summarizing the redemption clauses and sinking fund clauses of debenture issues of the Industrial Acceptance Corporation from the beginning of 1950 until the end of January 1957. However, the encouragements given to redemption by changes in the redemption clauses and in the sinking fund clauses have not always been in the same direction. On several occasions it happened that a change in the schedule of penalties for early redemption was offset in part in its effect on early redemption by changes in the proportion of the issue to be retired each year through the sinking fund operations. In the issue made early in 1953, a clause was included denying the right to redeem (except for sinking fund purposes) in the first five years if the redemption were part of a refinancing operation involving a switch to securities having lower yields. This clause did not appear in the mid-1953 issue nor in the 1954 issues but reappeared again in the mid-1956 and early 1957 issues when interest rates were rising substantially. In these last two issues there was a distinct stiffening of the penalty for redemption for other than sinking fund purposes. One must conclude that while these clauses reflect changing conditions in the market for the securities to some degree, the changes are not unequivocal in their effect on the over-all rate of redemption (including redemption for sinking fund

Table 5.26

REDEMPTION AND SINKING FUND CLAUSES OF SINKING FUND DEBENTURES ISSUED BY INDUSTRIAL ACCEPTANCE CORPORATION, 1950-JAN. 30, 1957

Issue	Redemption Clauses	Sinking Fund Clauses
	(30 days notice of redemption required on all issues)	
1. April 1, 1950; 4 percent, 19 years.	Redeemable in whole or in part at option of the company, at 102.5 percent during first year, this percentage decreasing by 1/8th of 1 percent in each of the next sixteen years. Redeemable at 100.5 percent in last ten years.	Starting in second year 2½ percent of the issue to be retired each year by buying in open market at a price not greater than redemption price, or by drawing at the then prevailing redemption price.
2. March 1, 1951; 4 percent, 19 years.	Redeemable in whole or in part at option of the company at 102.50 percent during first year, this percentage decreasing by ¼ of 1 percent in each of next eight years. Redeemable at 100.50 percent for next five years and at par in last five years.	Same as above except that 4 percent of issue to be retired each year after first.
3. July 2, 1952; 5 percent, 18 years.	Same as for issue No. 2.	Same as for issue No. 2.
4. January 2, 1953; 5 percent, 18 years.	Redeemable in whole or in part at option of the company at 102.50 percent during first year, this percentage decreasing by ¼ of 1 percent in each of next eight years. Redeemable at 100.50 percent in last ten years. Company denied the right to call for redemption in first five years if any obligations having a coupon of less than 5 percent are issued for the purposes of redemption.	Same as above except that 5 percent of issue to be redeemed each year after first.
5. July 2, 1953; 5½ percent, 20 years.	Redeemable in whole or in part at option of the company at 105 percent during first year, this percentage decreasing by ¼ of 1 percent in each year to maturity. Redeemable for sinking fund purposes at one-half of above premiums.	Same as issue No. 4.
6. February 1, 1954; 5¼ percent, 20 years.	Same as for issue No. 5.	Same as for issue No. 5 except that 3 percent of issue to be redeemed each year after first.
7. October 1, 1954; 4½ percent, 20 years.	Redeemable in whole or in part at option of the company at 104 percent in first year, this percentage diminishing by ¼ of 1 percent in each of next sixteen years. Redeemable at par in last four years. For sinking fund purposes, redeemable at one-half of above premiums.	Same as for issue No. 1.

(Continued on next page)

Table 5.26

REDEMPTION AND SINKING FUND CLAUSES OF SINKING FUND DEBENTURES ISSUED BY INDUSTRIAL ACCEPTANCE CORPORATION, 1950 - JAN. 30, 1957

(Continued)

Issue	Redemption Clauses	Sinking Fund Clauses
	(30 days notice of redemption required on all issues)	
8. June 1, 1956; 5¼ percent, 19 years.	Redeemable in whole or in part at option of the company at 105 percent during first year, this percentage decreasing by 3/10ths of 1 percent in each of next sixteen years. Redeemable at par in last two years. For sinking fund purposes redemption of one-half of above premiums. No redemption permitted in first five years as part of any refunding operation involving a lower rate of interest.	Same as for issue No. 6.
9. January 15, 1957; 5¾ percent, 20 years.	Redeemable in whole or in part at option of the company at 105.50 percent during first year, this percentage decreasing by 4/10ths of 1 percent in each of next four years, .35 of 1 percent in each of next eleven years. Redeemable at par in last four years. No redemption permitted in first five years as part of refunding operation involving a lower rate of interest.	A *purchase fund* is provided for in a clause whereby the company is obliged to use for last half of 1957, an amount equal to 2½ percent and for each year to 1976 inclusive, 5 percent of the amount of the issue to purchase these debentures to the extent that they are available at a price not exceeding par. The company may anticipate the expenditure obligation in whole or in part and credit the amount of the anticipated expenditure to a reduction of the purchase fund obligation.

purposes) of the issues. The most detailed analysis of call features of the securities of instalment finance companies in the United States that this author has seen neglects mention of sinking fund provisions but concludes with respect to the four largest companies that "the penalty provisions were insensitive to changing money and capital market conditions. There was some change in these provisions in 1948 but after this no material changes occurred. Until 1956 these options were highly favourable and added a high degree of flexibility to term debt acquired during this period. There are indications, however, that this situation had ended by the middle of 1956".[28]

A substantial portion of the long-term debt of the instalment finance companies is not offered publicly. For example, from public information

[28] Donald P. Jacobs, "Sources and Costs of Funds of Large Sales Finance Companies", *op. cit.*, p. 385.

relating to the consolidated balance sheet of the Industrial Acceptance Corporation, it may be calculated that of the total of secured notes (with original maturity exceeding one year) and sinking fund debentures outstanding at the end of 1955, amounting to just over $100 million, about 40 percent was not offered publicly. The debentures ($37 million) were all offered publicly; about $41 million of a total $65 million of secured notes were placed privately. Traders Finance Corporation at the end of 1955 had outstanding about $60 million collateral trust notes (with original maturity exceeding one year) and $20 million sinking fund debentures. Practically all of the collateral trust notes were privately placed. Of the private placements of these companies we do not know what proportion was directly placed in the sense that the deals were arranged directly between the issuer and the investor with or without the services of an intermediary but with the ultimate investor taking title to the securities directly. Direct placements have bulked large in the distribution of finance company securities in the United States; "from 1946 through 1955, 68.5 percent of total term debt offerings (having a maturity exceeding one year) was directly placed".[29]

Data in Canada are not adequate to exhibit differences among the companies according to size of assets. Using published consolidated balance sheets we may compare the structure of liabilities of four of the larger companies however. We must stress that these data are from consolidated balance sheets and are therefore affected by the activities of subsidiary lending and insurance companies. In Table 5.27 a percentage distribution of the combined liabilities of the Industrial Acceptance Corpora-

Table 5.27

PERCENTAGE DISTRIBUTIONS OF LIABILITIES OF TWO LARGE AND TWO SMALLER INSTALMENT FINANCE COMPANIES, 1955

	Two large companies[a]		Two smaller companies[b]	
Short-term notes and bank loans		40.3		46.4
Secured notes	20.7		14.6	
Debentures	9.5		11.0	
Total funded debt		30.2		25.6
Preferred stock	3.0		6.1	
Common stock	6.0		5.9	
Total capital stock		9.0		12.0
Earned surplus		5.5		2.7
Other liabilities		14.9		13.4
Total liabilities		100.0		100.0

a Industrial Acceptance Corporation (Dec. 31), Traders Finance Corporation (Dec. 31).
b Laurentide Acceptance Corporation (Oct. 31), Union Acceptance Corporation (Dec. 31).

29 Donald P. Jacobs, "Sources and Costs of Funds of Large Sales Finance Companies", *op. cit.*, p. 386.

tion and the Traders Finance Corporation is contrasted with that of the combined liabilities of the Laurentide Acceptance Corporation and the Union Acceptance Corporation. It will be noted that the proportion of liabilities represented by capital stock was smaller for the large companies, the difference being accounted for almost entirely by the smaller porportionate size of preferred stock outstanding in the larger companies. The proportion of short-term notes and bank loans is also smaller for the larger companies than for the smaller ones. Funded debt is a larger proportion of liabilities for the large companies than for the smaller ones.

These data are not entirely satisfactory, since they derive from consolidated balance sheets, are not wholly representative of the largest companies operating in Canada and do not cover the smallest companies engaged in instalment finance. Data for the United States are rather more complete and satisfactory for comparing the distributions of liabilities in companies of different size. A selection of such data for the United States is shown in Table 5.28. It will be noted that short-term debt to banks increases as a proportion of liabilities with increasing size of company, except for the very largest companies for which commercial paper held by non-bank investors amounts to more than one-quarter of all liabilities.

To conclude this factual survey of the financing of the instalment finance companies we remark that currently, considering all companies together, the principal instrument for raising funds is the short-term secured

Table 5.28

DISTRIBUTION OF LIABILITIES OF INSTALMENT FINANCE COMPANIES BY SIZE OF COMPANY, UNITED STATES, MID-1955

	Size of company (Consumer loans outstanding in thousands of dollars)						
	Under 100	100-499	500-999	1,000-4,999	5,000-24,999	25,000 and over	Total
Short-term notes and bank loans	18.4	30.7	48.1	58.4	59.4	46.4	48.0
Short-term notes payable to banks	14.2	22.0	34.5	44.4	50.3	19.0	—
Commercial paper and other short-term debt	4.2	8.7	13.6	14.0	9.1	27.4	—
Funded debt	29.1	21.1	13.6	12.9	18.1	37.7	31.8
Capital and surplus	45.8	39.8	30.0	22.1	16.5	11.2	14.9
Other liabilities	6.7	8.4	8.3	6.6	6.0	4.7	5.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: *Federal Reserve Bulletin*, April 1957, p. 408.

note maturing in less than one year. Longer term notes backed by receivables in the form of instalment paper rank second. Bank loans, sinking fund debentures, common stock and preferred stock then follow in that order. Subsidiaries of United States firms are able of course to draw funds from their parents in one form or another, and independent Canadian firms have been known to borrow in the United States. The short-term note has in Canada risen to its present important status during the post-war period and its development may be regarded along with the enlargement of the market for treasury bills as an aspect of the general maturing of the capital market. We have commented on the call features of the longer term debentures of the instalment finance companies and on the common practice of placing the companies' notes privately. We have not referred to rates of interest at which the companies have borrowed; this will be discussed along with other regulators of the flows of funds to the companies in the section of the chapter on regulators which follows. We turn now to a brief review of the services supplied by the instalment finance companies and the growth of their assets in the post-war years.

The instalment finance companies are engaged in the business of financing purchasers of and dealers in durable goods. Their financing of final purchasers is for the most part through an instalment loan contract; the total value of such contracts outstanding is referred to as their retail paper outstanding. They also finance dealers' inventories of durable goods; this finance is typically of much shorter term than instalment or retail finance. The outstanding amount of accommodation to dealers is referred to as wholesale paper outstanding.

At the end of 1954 the instalment finance companies had outstanding retail paper in the amount of $648 million and wholesale paper in the amount of $107 million (see Table 5.29). Of the retail paper outstanding

Table 5.29

ASSETS OF INSTALMENT FINANCE COMPANIES IN CANADA

	Amounts outstanding[a] end of 1954		Accumulation of changes[b] 1946-54	
	Millions of dollars	%	Millions of dollars	%
Retail paper	650	79	635	79
Wholesale paper	105	13	105	13
Other assets	65	8	60	8
Total	820	100	800	100

a From worksheets underlying estimates for National Transactions Accounts.
b From Part VI below.

approximately three-quarters covered consumer goods (including all types of passenger cars, new and used) and one-quarter covered commercial and industrial goods (including all types of commercial vehicles, new and used). It so happens that about three-quarters of the outstanding retail paper covered passenger cars and commercial vehicles, while one-quarter covered other types of goods.[30]

The retail paper outstanding constitutes about 80 percent of the assets of the instalment finance companies, and wholesale paper accounts for another 13 percent. Attention has been drawn earlier in this chapter to the extremely rapid rate of growth of instalment finance in the post-war period. On the whole the volume of retail paper and the volume of wholesale paper have grown at about the same rate. At the end of 1956 the total volume of retail and wholesale paper of instalment finance companies that was outstanding was in excess of $1,200 million.

The companies acquire their retail paper largely through dealers in durable goods. Practices apparently differ quite widely, but we have no need or desire to describe them at any length here.[31] The usual practice is for the dealer to acquire the customer's signature on the finance paper and then for a consideration, to turn the paper over to a finance company which checks on the customer's credit worthiness, frequently by telephone. The explanation of the "consideration" given the dealer, and the protection given the finance company each involve the so-called dealers' reserves. In addition to requiring the customer to take out life insurance for the term of the debt, the instalment finance company normally requires the dealer to build up a reserve with the finance company against which the company may make claim in the event of the customer's default. This "hold-back" is of that proportion of the finance charge on each contract which the finance company grants to the dealer.[32] After these "dealer reserves" have reached an agreed proportion, perhaps 3 percent to 10 percent[33] of the dealer's outstanding contracts with the company, then "hold-backs" become "kick-backs" to the dealer and in many cases constitute an important part of his income. As may be imagined, the instalment finance companies rely very greatly on the dealers for their business, and competition among these companies is more likely to focus on the dealer than on the customer (the final purchaser of the goods being financed) and to be reflected less in the *total* finance charge than in the terms of

30 These proportions have been calculated from figures shown in the *Statistical Summary, Financial Supplement, 1956,* Bank of Canada, pp. 60-61. We have mentioned earlier that the Bank of Canada in its compilation of instalment finance figures includes instalment finance supplied by loan companies, which we do not include in the National Transactions Accounts for instalment finance companies. Dollar figures have been rounded to even five millions.

31 For descriptions of practice in the United States the Federal Reserve Board study *Consumer Instalment Credit* may be consulted.

32 "Typically the dealers' share in early 1956 was one-fifth to one-third of the total finance charge." "Operating Characteristics of Consumer Credit Institutions", *Consumer Instalment Credit, op. cit.*, Part I, Vol. I, p. 55. This quotation refers to automobile financing in the United States.

33 For six of the largest instalment finance companies operating in Canada, we have calculated (using balance sheets, which for some companies were supplied to us on a confidential basis) that at the end of 1953 and at the end of 1954, dealers' credit balances amounted to some 5.6 percent of the retail credit outstanding.

arrangements with the dealers. The dealers, of course, prefer that the proportion of the finance charge on each contract that is granted to them be high and that the required proportion of balances with the finance company to contracts outstanding be low. Competition among finance companies for the favour of dealers is not limited to negotiations on these two proportions however. The companies provide other services to dealers not the least of which is wholesale financing of their inventories. The bargaining power is not all on one side here either but with respect to United States' experience it has been reported that "it is frequently said that the wholesale finance charge paid by dealers is barely sufficient and sometimes insufficient, to cover the costs of these services".[34]

We turn very briefly now to the activities of other institutions specializing in consumer finance, loan companies and licensed money lenders, and credit unions.

b. Small loan companies and licensed money lenders

At the end of 1954 four small loan companies and sixty-one licensed money lenders reported to the Superintendant of Insurance as the administrator of the Small Loans Act. Money lenders or loan companies which charge a rate of interest less than that laid down in this Act respecting loans less than a given size or which make loans larger than this given size are not required to be licensed by the Superintendent and it is not known how many such lenders there may have been. It is known, however, that the Household Finance Corporation Limited was the largest of the organizations not required to report.[35]

A statement of the assets and liabilities of the firms licensed under the Act (plus those of the unlicensed Household Finance Corporation Limited), and the changes in these from 1946 to 1954 is given in Table 5.30.

On the asset side of the balance sheet, loans outstanding amounted to almost one-quarter of a billion dollars. A vast proportion of these assets was controlled by the subsidiaries of companies owned in the United States. According to the Superintendent of Insurance, subsidiaries of ten United States concerns transact 85 percent to 95 percent of the total small loans business in Canada.[36] On the liabilities side of the balance sheet bank loans accounted for some 15 percent of liabilities and claims of associated enterprises for the great bulk of the total. The small loan companies under the Act are not allowed to accept deposits and before the change of 1956

34 "Operating Experience", *Consumer Instalment Credit, op. cit.*, Part I, Vol. I, p. 67.

35 Prior to the changes of 1956 in the Small Loans Act, discussed below, the Household Finance Corporation of Canada confined itself to the making of loans in amounts of $500 or less, the maximum size of loans on which the rate of interest was then limited by the Act, and the Household Finance Corporation Limited confined itself to the making of loans in amounts exceeding $500, and was not required to be licensed under the Act.

36 See the evidence of Mr. K. R. MacGregor, Superintendent of Insurance before the Banking and Commerce Committee of the House of Commons in Minutes of Proceedings and Evidence, Standing Committee on Banking and Commerce, House of Commons, 1956, p. 446. See also *ibid.*, p. 709 and p. 973.

Table 5.30

SMALL LOAN COMPANIES AND LICENSED MONEY LENDERS[a]
ASSETS AND LIABILITIES

	Amounts outstanding[b] end of 1954		Accumulation of changes[c] 1946-54	
	Millions of dollars	%	Millions of dollars	%
Assets				
Instalment credit	8	3	8	4
Loans	209	92	183	93
Other	10	4	6	3
Total assets or liabilities	227	100	197	100
Liabilities				
Bank loans	35	15	30	15
Claims of associated enterprises	162	71	144	73
Other	30	13	23	12

a Includes Household Finance Corporation Limited.
b From worksheets underlying National Transactions Accounts.
c From Part VI below.

in the Act were not allowed to issue bonds, debentures or other securities for money borrowed.[37] (This latter restriction against the issue of securities was removed in 1956.) These claims of associated enterprises include both amounts lent and subscribed to capital stock by parent companies.

c. Credit unions

Credit unions are co-operative credit societies accepting deposits from their members, and making loans to their members. They actively promote individual saving, and the provision of consumer credit is only one of their functions. According to the Economics Division of the Department of Agriculture, there were in 1955 some 4,100 credit unions in Canada.[38] A statement of assets and liabilities is shown in Table 5.31. Assets amounted to one-half of a billion dollars at the end of 1954 of which a little over one-quarter was invested in loans to members, a little over another quarter in bonds, probably mostly junior and senior government bonds, and a little over 30 percent in mortgages. Liabilities of the credit unions are made up almost wholly of the shares and deposits of members.

C. Regulators of the Flows of Funds

In Section B of this chapter we reviewed the information available on the magnitudes of the financial flows to and from the consumer sector of the economy. We studied the aggregate flows, drawing on the National Trans-

37 Mr. MacGregor testified that although the prohibition against debenture issues applied only to small loan companies, he had made it a condition of licensing these small money lenders, in the interests of consistency, that they refrain from issuing debentures, ibid., p. 447.

38 *"Credit Unions in Canada, 1955"*, Economics Division, Department of Agriculture, Ottawa, (mimeo.), p. 5.

Table 5.31

CREDIT UNIONS
ASSETS AND LIABILITIES

	Amounts outstanding[a] end of 1954		Accumulation of changes[b] 1946-54	
	Millions[c] of dollars	%	Millions[c] of dollars	%
Assets				
Loans	150	27	130	31
Mortgages	170	31	135	34
Bonds	145	26	80	20
Other	85	16	60	15
Total assets or liabilities	550	100	405	100
Liabilities				
Deposits	510	92	370	92
Other	40	8	35	8

a From worksheets underlying National Transactions Accounts.

b From Part VI below.

c Dollar figures have been rounded to even five millions.

NOTE: As is noted in Part VI, the statistics of credit unions' assets and liabilities are unsatisfactory in several respects. It should be noted that in the National Transactions Accounts the central credit union organizations are consolidated with the credit unions in the accounts for the credit union sub-sector.

actions Accounts and we examined such data as could be found on the distributions of assets and debts by income level and compared these with the size distributions of income. We also considered the assets and liabilities of financial institutions which concentrate on the supplying of financial accommodation to consumers. It remains to point up the significance of this information in the balance of the chapter. We shall do this in this and the next following section. In the present section, which is still largely factual, we consider how the flows and balances that we have studied have been affected by the regulators — governmental regulators, price regulators and non-price regulators — and in the final section we attempt an assessment of the workings of the capital market with respect to the financing of economic activity in and by this sector on the basis of the facts set forth and in the light of the objectives stated in Chapter 2.

1. Consumers and the regulators of the flows of funds

a. Tax regulators

Through direct taxes on incomes, governments in Canada have taken a larger and larger share of personal income. Our figures do not extend back of the middle twenties, but the national accounts data show that in 1927 to 1929 an average of 1.4 percent of personal income was paid to governments as direct taxes. This ratio rose to 2.7 percent in 1937-39, 6.9 percent in 1947-49 and 7.7 percent in 1954-56. It is a simple fact that taxes paid to governments can be neither invested by

the taxpayer nor spent directly by him for goods and services. The income tax is a progressive one taking a larger percentage of high incomes than of low ones, but because of the distribution of pre-tax income, the bulk of the taxes are not paid by those in the high income tax brackets. Notwithstanding this, the relative effects of the tax on items which bulk large in the expenditure and investment patterns of high — rather than low — income tax payers will be greater than on other items. Of course, the direct taxes are not the only ones paid by consumers. Indirect taxes in considerable variety are also paid, and although we do not have any very precise knowledge it would seem that the incidence of indirect taxes increases much less sharply with income than that of direct taxes.

The details of the tax regulations, especially the income tax regulations, also affect the investment patterns and perhaps the saving patterns of consumers or individuals. The treatment of capital gains and of dividends of Canadian corporations, the differential treatment of investment income earned through life insurance premiums and other forms of investment, and the exemption from currently taxable income of contributions to approved pension funds are all cases in point. It is impossible to be certain of some of the effects on investment practices of these details of the regulations.

In Canada capital gains are not taxable as income. One feels that this must inevitably give an advantage to forms of investment for which the prospects of capital gains are better over other forms for which these prospects are poorer. But one cannot then forthwith jump to the conclusion that corporation stocks are given an advantage, for the prospect of capital gain can be built into newly issued bonds by arranging the coupon yield below the yield in the market so that the bonds will be issued substantially below par. One can observe that recognition has been given to this consideration in the issuing of bonds[39] but it is virtually impossible to appraise the magnitude of the effect on investment in stocks by individuals of the absence of a capital gains tax in Canada. It is conceivable that one might enquire of a sample of individual investors as to the motives that led them to purchase stocks and thus gain some impression of degree to which this detail of the tax regulations in fact influenced them, but to the writer's knowledge no such investigation has ever been undertaken in Canada. Such an investigation was undertaken in the United States where it will be granted the situation is somewhat different. For one thing capital gains *are* taxed in that country, though at a substantially lower rate than (other) income. The sample of individual investors was of so-called "active" investors, those whose names were in the files of contacts of security dealers. The number of investors included in the sample was 746 and included 206 individuals with 1948 incomes below $7,500; 66 with incomes

[39] It should be noted that since corporations can only claim as an expense for income tax purposes the coupon rate on their bonded indebtedness, this tax regulator affects corporate issuers, though not governments, in the opposite sense to the effect on the individual investor.

of $50,000 or over and 26 with incomes of $100,000 or over. The analysis of the effects of taxation on the investment objectives of these individuals was based on a classification of the investors according to their investment objectives. It was found that the proportion of the sample ranking capital appreciation, very high among their investment objectives, increased with income from about three-tenths of those with incomes below $7,500 to seven-tenths of those with incomes of $100,000 or over though the authors of the study recognize that the sample was, relatively to the population at large, probably biased toward venturesomeness in investment objectives, especially in the lower ranges of income. For conservative-minded investors (those concerned mainly with preservation of capital and the earning of income) the great bulk declared that they were not influenced by taxes in their investment policies. With respect to appreciation-minded investors, the authors concluded that:

> "...the single most important feature of the tax structure is the differentially low rate at which long-term capital gains are taxed in comparison with the much higher rates on ordinary income, especially for those in the upper income brackets. This differential has stimulated inherently venturesome individuals to seek out investments which offered prospects of capital gains rather than the receipt of ordinary income. As a consequence, it has caused this group of investors to shift funds out of relatively conservative investments, offering little or no opportunity for capital appreciation and into more venturesome types of investments such as relatively speculative marketable common stocks, closely held companies, new ventures, real estate and oil properties".[40]

This material suggests that the absence of capital gains taxes in Canada may be *a* factor encouraging appreciation-minded investors who apparently are concentrated in the upper income groups, where stock ownership is also concentrated, to invest in fields offering prospects of capital gains. But as the authors we have quoted have emphasized, it is very difficult to plan and to interpret interviews of the kind underlying their study; it is all the more risky to speculate as to the extent to which conclusions relating to another environment may relate to our own. We take no dogmatic position on the matter.

For some years Canadian individual investors have enjoyed the privilege of reducing their income tax bill by an amount equal to a percentage of the dividends they have received from Canadian corporations. In 1949, when the measure was first introduced, the deduction allowable was set at 10 percent, in 1953 it was raised to 20 percent. We do not have data by which to judge the effectiveness of this regulation in encouraging investment by individuals in shares of Canadian corporations. Taxation data published

40 J. Keith Butters, Lawrence E. Thompson and Lynn L. Bollinger, *Effects of Taxation: Investments by Individuals,* Harvard University, 1953, Chapter II, esp. pp. 41-42.

by the Department of National Revenue did not distinguish classes of investment income before the 1950 taxation year and have never separated dividends paid by Canadian corporations from those paid by other corporations. Again, as in the case of the treatment of capital gains one would surmise that the effect of the regulation would be to encourage investment in Canadian equities, but we have no direct indication of the extent of such an effect.[41]

Another feature of the tax regulations that could conceivably affect the channelling of individuals' investible funds is the differential treatment of investment earnings accruing to individuals through the medium of life insurance policies on the one hand, and investments in bonds, stocks or mortgages on the other hand. If an individual buys a whole-life insurance policy, the company earns interest on the premiums throughout the life of the policy and the return to the policyholder's beneficiary is not, of course, subject to income tax, whereas if the individual had built up his estate through investment in bonds or stocks, the current income from these securities would have been taxable.[42] If this feature of the tax regulations is important it is especially so for those individuals with high marginal tax rates.

It is a moot question whether this consideration affects investors to any significant degree. In the Harvard study quoted earlier on *Investments by Individuals,* over three-quarters of the investors surveyed claimed they had never deliberately decided to use an insurance company as custodian and manager of their investments. Of the other one-quarter of the respondents, only one individual claimed minimizing of income taxes as his motive.[43]

A feature of the income tax regulations which very likely has an effect on the channelling of individuals' investible funds is that which permits the deduction from taxable income of contributions to "approved" pension plans. There are of course a great many factors underlying the very pronounced growth in group pension schemes over the last decade or two; insofar as the tax consideration has been of importance it is because of the expectation that income earned before retirement and contributed to an

41 On pp. 7566 and 7567 of the evidence taken by the Royal Commission on Canada's Economic Prospects on February 27, 1956, the following statements appear:

> "Mr. Kilburn: . . . since the establishment of the 10 percent and then the 20 percent tax relief, we know beyond question through our own experience that the acceptance and distribution of common and preferred equity securities has gone on at a very much more rapid pace; it is continuously being extended, and the extension is directly the result of the tax relief that we are referring to.
>
> Mr. Nixon: It is particularly marked in the case of preferred shares . . . "

Mr. Peter Kilburn of Greenshields and Company and Mr. Stanley Nixon of Dominion Securities Limited appeared on behalf of the Investment Dealers' Association of Canada.

42 The situation is slightly more complicated in the case of endowment policies and life annuities. In the case of an endowment policy, if the endowment is taken out in a lump sum, the total including the interest earned by the company is regarded in Canada as a return of capital (provided income tax was paid on the premiums as they were paid) and is consequently not taxed as income. On the other hand if the endowment is taken out in the form of life annuity then (assuming again that premiums were paid out of taxed income) the present value of the annuity calculated by formulae laid down in the regulations is regarded as a return of capital and hence is not taxed as income. (This is not a precise and general rendering of the income tax regulations but indicates their spirit if not their letter.)

43 Butters, Thompson and Bollinger, *Investments by Individuals, op. cit.,* pp. 316 to 326 esp. Table XII-2, p. 319.

approved pension scheme will be subject to taxation after retirement at significantly lower marginal and average rates. That this feature of the tax regulations may be of significance is attested, for example, by the demands that self-employed persons be allowed to make deductible contributions to approved pension schemes. The granting of this right by the federal government in the budget of 1957 led immediately to a selling campaign by trust and other companies of plans to which individuals could contribute income on which the tax was deferred. In the advertising literature attention was drawn to the presumed tax advantage offered by the scheme.

Of course, the rules laid down by the taxing authorities governing the investment practices that pension fund administrators must follow in order for the plans to be approved have a profound effect on the ultimate channels into which individuals' pension fund contributions flow. In the past, these rules have limited investments to those authorized under the Canadian and British Insurance Companies Act. Of late there have been some relaxations in the investment provisions of the regulations, but we shall take this aspect of the matter up later in Chapter 7.

The taxation of estates probably has some influence on the form and perhaps the amount of consumer saving. This is undoubtedly a most complicated area for study and we shall not become enmeshed in it. We may however mention one effect of estate taxation on the types of investment undertaken, the direction of which is non-controversial. For large estates the necessity of meeting a large tax bill quite suddenly implies the desirability of keeping a substantial portion of the estate in assets that are readily and cheaply convertible into cash. The value of life insurance in this respect is often argued by life insurance salesmen and undoubtedly the argument has been effective.

Another effect of the succession duty legislation has been to promote schemes for minimizing duties. One of the most common of these, apparently, is that whereby a man of means leaves his estate to his children and provides that his widow is to have a life interest in the proceeds. Under the present federal and provincial legislation, this avoids double succession duties (such as would be required if the estate were left to the widow who in turn left it to the children upon her death) and it also involves lower duties than if the estate were left directly to the children. The saving of duties by this scheme is large enough to have encouraged its rather widespread adoption. (We cannot be precise of course.) The point we are interested in is that bequests in such form require the appointment of trustees for the purpose of managing the funds. The important question is one we cannot answer; it is the question whether in this way succession duties have encouraged the appointment of trustees with authority to invest only in securities under the "prudent man" regulations imposed on trust companies or of trustees with much wider investment powers. This question is only the first

of several that may be asked about the dark unknown area of the investment of funds held in trust.

We have mentioned specific details of the tax legislation that may affect the channelling of consumers' funds. It is unfortunate that in most cases we can give no very definitive indication of the degree of the influence of the tax regulations. There is even a question of the extent to which individual investors are aware of the details of the regulations. On the whole, consumers are not sophisticated investors as we shall argue further below. This is not to deny that there are some highly sophisticated individual investors. Probably the degree of sophistication varies directly with income and this not only because those with higher incomes gain more investment practice but also because they are more prone to seek and consider professional advice.

b. Price regulators

The amount of saving as well as the allocation of saving by the consumer sector undoubtedly is influenced by the prices of goods and services (and the excise taxes they reflect) as well as by the prices or yields of securities. The decision to buy or sell government bonds or to increase or reduce bank deposits reflects as much the prices of automobiles and houses as the rate paid on deposits and the yield on bonds. Though no conclusive "proof" can be offered, one suspects that for a very great many consumers, indeed we might even hazard the guess that for the bulk of consumers, the prices of goods and services figure more prominently in their calculations than the returns on alternative financial uses of their funds or the costs of borrowing. There is always a substantial body of consumers who do not save positive amounts at all. We do not have figures for Canada, but in the United States, for example, in 1948 and 1949 the percentage of spending units which saved positive amounts was of the order of 60 percent to 65 percent. The proportion of spending units which saved positive amounts increased from substantially less than one-half at the lowest income level to 80 percent to 85 percent at the level $7,500 and over. There are many savers whose saving is of a contractual nature and is inextricably associated with the purchase of goods and services. In this category one must place saving through life insurance premiums and contributions to pension funds as well as the saving involved in repayment of mortgage debt[44] and debt incurred particularly in connection with purchases of other durables. For yet other consumers saving though not contractual is in the nature of a residual activity, rather than one undertaken deliberately in an effort to earn investment income. Much of this saving must find its way into liquid assets such as bank deposits, and government bonds especially of the non-marketable variety. While this residual saving can scarcely be said to be related particularly to the prices

[44] Even though in the National Transactions Accounts we account this repayment in the unincorporated business sector and the saving thus takes the form of an increase in equity in unincorporated business activities.

of goods, neither can it be argued that it is responsive to the yields of investments. This raises the question to which we wish to direct attention especially in this sub-section, namely to what extent is the supplying and demanding of funds in the consumer sector of the economy responsive to the yields on investments and the alternative costs of borrowing. It may be that the bulk of consumers is concerned more with prices of goods or services than prices of securities, so to speak, in their calculations, but it may nevertheless be true that the greater proportion of the funds moved out of and moved into the consumer sector are moved by consumers who are sensitive to yields and the costs of funds. Even if one may doubt whether consumers who are sensitive to yields and costs move the bulk of the funds entering and leaving the consumer sector it may still be true that a marginal group of consumers, or consumers who move marginal amounts of funds, are sufficiently sensitive to yields and costs as to make it possible for changes in these to have significant effects on the channelling of the flows out of and into the sector. After all, the important question is whether the changes in relative prices are effective at the margin. However, with respect to the consumer sector it is particularly difficult to give a satisfactory answer to the question on the basis of the information available. As we have remarked in other connections earlier in this study, we know all too little about the consumer sector, too little about its aggregate flows of funds, let alone the relation of these flows to yields and costs. To facilitate our presentation of the matter we shall consider consumers as investors first, and as borrowers later.

In order to discuss how sensitive consumers are to changes in yields and differences in yields on different classes of financial assets, one would need information on the changes in their portfolios that could be matched with data on yields. Our poverty in this field can be amply illustrated by the reminder that in estimating annual flows of funds we had to be content with estimates that for the consumer sector combined stocks of all kinds with all types of non-federal government bonds. We are a very long way yet from, say, monthly series on purchases and sales of financial assets by consumers which can be matched analytically with monthly series on the yields of these assets. It would be particularly helpful if an income distribution of the purchases and sales were available but this is of course an even more utopian prospect.

There are some scraps of information of this kind; we have monthly series and indeed, beginning recently, weekly series, on outstanding Canada Savings Bonds and savings deposits in commercial banks, assets which are held entirely in the consumer sector. We have the corresponding information on the yields of these assets.

In Canada it is customary to announce the terms of a new series of savings bonds in late August and for sales to begin at the middle of October. The bonds offered in late 1955 were 12-year bonds and had

a yield to maturity of 3.25 percent. They were cashable at par plus accrued interest at any time. Over the year (1956) the interest rate payable on the minimum balances in personal savings accounts at commercial banks rose from two percent to two and one-half percent. In the fall of 1956, 12½ year bonds were offered with an *average* yield to maturity of 3.76 percent so that the spread in yields on these bonds and savings deposits was maintained, but the yield was graduated so as to increase with the length of time the bonds were held.[45] (The feature permitting conversion to cash at any time at par plus accrued interest was retained.) In spite of the penalty against early encashment of the bonds, the fall in Canada Savings Bond holdings from the end of November 1956 to the end of June 1957 was 10.8 percent as compared with a fall of 6.8 percent from the end of November 1955 to the end of June 1056.[46] In February of 1957 the rate on savings deposits in commercial banks increased again to two and three-quarters percent, and there was a noticeable decline in the rate of increase of savings bond holdings as compared with the rate of increase of savings deposits in the first half of 1957.[47] It is a moot question whether the increase in the rate of encashments in spite of the penalty involved, is evidence of lack of awareness of yields available on this and other assets or not. We cannot answer on the basis of this information. However, it could be argued that the authorities felt it was necessary to raise yields on the 1957 series in order to attract buyers, for at the end of August it was announced that the average yield to maturity on 13-year bonds to be issued in October would be 4.46 percent per year. One wonders how the authorities view the degree of sophistication of consumer-investors, however, when one reflects that if the 1957 bonds were held only two years they would yield 3.25 percent and that in September the government offered 2-year marketable bonds at a yield of 4.97 percent which in the event did not quickly draw the bonds out of the dealers' hands. It may be granted that these marketable bonds were not offered in denominations below $1,000 and could not be purchased through payroll deductions, in the same way as savings bonds. One suspects that the official view is that the market is highly compartmentalized and that the buyer who would be attracted by 3.25 percent on a saving bond held two years would not likely be aware that 4.97 percent could be obtained on a two-year marketable government bond. The writer's feeling is that such compartmentalization *is* a characteristic of the market.

In the United States the Chairman of the Board of Governors of the Federal Reserve System after noting that yields of marketable United

45 For the first year and a half the yield was 3.25 percent; for the next two, 3.50 percent; for the next two, 3.75 percent; and for the remaining seven, 4 percent.

46 These figures pertain to *all* series of outstanding Canada Savings Bonds; the monthly amounts outstanding of each series are not made public.

47 Comparing average figures for the first six months of 1955, 1956 and 1957, we find that outstanding savings bonds increased 17 percent from 1955 to 1956 and only 2 percent from 1956 to 1957. Savings deposits increased by 7 percent from 1955 to 1956, and by 6 percent from 1956 to 1957.

States government securities had risen above the yield on savings bonds and that rates paid on deposits by banks and other institutions had increased, remarked that "without some adjustment in the relative returns obtainable from savings bonds as compared with other forms of investment, net liquidation of savings bond debt is likely to continue at an accelerated pace . . .".[48] This authority apparently felt that there was some sensitivity to yields among consumer investors. However, he was also aware of some compartmentalization in the market as he observed that "sales of large denomination E and H bonds have been more sensitive to changes in flexible interest rates than has been true of smaller denomination bond sales".[49]

In both Canada and the United States the rates paid on deposits by trust companies and other savings institutions move in close accord with the rates paid by banks. It could therefore be argued that the officers of these institutions think, at least, that consumer investors are sensitive to these rates. Probably they are right.

Probably there is a strong degree of compartmentalization of the market with groups of investors confining themselves to restricted groups of investments and perhaps showing some sensitivity to yields within the class of assets they buy. But nevertheless there are likely a few investors, on the margins, so to speak, who respond to changes in interest rates on assets within wider groupings. But the information we have leads only to this weak and qualified conclusion.

There may be other types of information of this kind on flows of funds in relation to yields that could be cited to illumine the question of the sensitivity of consumer investors to alternative yields, but in the main we are forced to rely on information of a different kind, namely that which we arrayed in Section B.1. of this chapter. Unfortunately it is not such as will support a categorical conclusion. We can neither argue from this information that the largest proportion of the funds moved out of the consumer sector was moved by consumers who are relatively insensitive to yield differentials nor that "at the margins" there are significant shifts of flows of funds in response to changing differentials. But let us review the information, such as it is.

In Table 5.2 above we showed the percentage distribution of the increases in financial assets of the consumer sector cumulated over the years 1946 to 1954. These figures showed that of the net increase in such assets, 47 percent represented increases in holdings of deposits and Government of Canada bonds and payments of insurance premiums and certain contributions to pension funds. Another 22 percent represented increases in claims against unincorporated business, while increases in stocks and

48 "Interest Rates on Savings Bonds", Statement of Chairman Martin of the Board of Governors of the Federal Reserve System on bills to increase the maximum interest rate permitted on United States Savings Bonds, before the Committee on Ways and Means of the House of Representatives, Feb. 21, 1957. Reprinted in *Federal Reserve Bulletin,* March 1957, p. 270.

49 *Ibid*, p. 270.

other bonds accounted for 12 percent, and mortgage investments another 13 percent. However, over this period consumers reduced their holdings of marketable Canada bonds (though not of savings bonds). Moreover, the claims on unincorporated business include not only the investment of consumers in such business as ordinarily conceived but also in the business of home owning which is not always considered as unincorporated business. If we omit claims on unincorporated business and marketable Canada bonds from the calculation, we see that of the remaining items, mortgage investments and "stocks and other (non-Canada) bonds" amounted to about one-quarter of the total flow (each comprising about one-eighth) while deposits, non-marketable Canada bonds and insurance and pension contributions comprised a little over two-thirds of the total flow. This calculation gives us some feel for the orders of magnitude involved. More than two and one-half times as much flowed into deposits as into stocks and non-federal bonds combined. More was invested in currency and deposits than in stocks, non-federal bonds and mortgages combined. More than two and one-half times the amount invested by the consumer sector in stocks, "other bonds" and mortgages is represented by investment in liquid assets such as deposits and savings bonds and contractual saving through insurance premiums and certain contributions to pension funds.

Our data on contributions to pension funds are incomplete and there is a possibility that consumer saving has been underestimated in two or three of the post-war years, but allowing for those considerations it appears that about 30 percent of consumer saving over the years 1946 to 1954 is accounted for by insurance premiums and contributions to pension funds. This is contractual saving, and it is exceedingly doubtful whether a significant proportion of it was undertaken in response to calculation of the yields available on the monies so disbursed. Such saving is part of a package which includes protection against loss of life or earning power and in some cases is a condition of employment. The yields earned are not generally known among the investing public. Moreover, the Harvard survey cited earlier of "active" and presumably relatively sophisticated investors revealed that very few buyers of life insurance are motivated by investment considerations.[50]

The data on saving by income levels showed that the proportion or spending units accomplishing a positive amount of saving increases with income. As a consequence we find that by and large the proportion of all spending units holding assets rises with income for all assets. The patterns in these frequency data differ however. The frequencies at any income level show marked differences as among different classes of assets, and for some kinds of assets such as savings deposits and savings bonds the frequencies fall off at the higher income levels.[51]

[50] See above p. 170.

[51] See Tables 5.12 and 5.13.

Liquid assets are held much more commonly throughout the income scale than stocks. The Canadian data which include all bond holdings among liquid assets show that among non-farm families in 1956 the frequency of holding rises from 54 percent in the "under $1,000" class to 94 percent in the "$10,000 and over" class. The frequency of holding of marketable stock however is only 3 percent in the "under $1,000" class and reaches only 51 percent in the "$10,000 and over" class. Liquid assets are held much more commonly throughout the income scale than is marketable stock. Ranking spending units from low income to high, we found that those with incomes below $5,000 earned about one-half of the income and held about one-half of the liquid assets. Approximately 82 percent of the liquid assets held by the non-farm families surveyed were held by those with incomes under $10,000. We do not have figures showing the income distribution of the amount of stock held by consumer units in Canada. American figures suggest that from 50 percent to 80 percent of the marketable stock owned by individuals was held by those with incomes *over* $10,000.[52] The Wisconsin data (which of all the sources available shows the widest distribution of stock holdings) suggests that at least 60 percent of untraded stocks are held by individuals with incomes over $10,000. Whatever the precise proportions, it is almost certain that the proportion of marketable stock held by those with incomes over $10,000 is less than the proportion of all untraded stock held by the same spending units. From this information and from such limited information as we were able to find on portfolio distributions by income level we may conclude that liquid assets have the most prominent place in the portfolio of the lower income groups, and that stocks have the most prominent place in the portfolio of the higher income groups. Moreover, it would seem that at successively higher income levels the proportion of generally riskier and less liquid assets increases.

Throughout the income ranges, the Canadian data show that far more consumer-investors held savings deposits in commercial banks than held deposits in other institutions which by and large paid higher rates, and far more held savings deposits than held Canada Savings Bonds which also paid a higher rate and which were encashable at par at any time.[53] Of those who held savings deposits, the proportion having no Canada Savings Bonds fell from a high of 78 percent in the "under $1,000" and rose again to 58 percent in the bracket "$10,000 and over" as may be deduced from Table 5.32.[54] It is clear that most holders of savings deposits were not lured by savings bond yields to switch even $50 from savings deposits into savings bonds. On the other hand, among those who held either savings bonds or savings deposits or both, the proportion who held both was over one-fifth in the lowest income brackets and rose to approxi-

52 See Table 5.14.

53 See Table 5.12 above.

54 For somewhat similar data for the United States, the reader is referred to "The Financial Position of Consumers" in *Federal Reserve Bulletin,* August 1957, pp. 878 to 901, especially Supplementary Table 8, p. 896.

Table 5.32

DISTRIBUTION OF HOLDERS AND NON-HOLDERS OF CANADA SAVINGS BONDS AND SAVINGS DEPOSITS IN CHARTERED BANKS, BY INCOME LEVEL CANADA, EARLY 1956

Percentage of units holding

Income level in 1955	No C.S.B.'s and no savings deposits	C.S.B.'s and no savings deposits	Savings deposits and no C.S.B.'s	C.S.B.'s and savings deposits	Total
Under $1,000......	54.6	3.2	32.1	10.1	100.0
$1,000- 1,999......	50.8	3.9	33.8	11.5	100.0
2,000- 2,999......	48.8	2.8	37.0	11.4	100.0
3,000- 3,999......	38.4	6.6	41.1	13.8	100.0
4,000- 4,999......	33.2	5.9	40.7	20.2	100.0
5,000- 6,999......	21.3	6.9	47.0	24.8	100.0
7,000- 9,999......	15.3	6.9	38.6	39.2	100.0
10,000 and over....	22.6	5.8	41.2	30.4	100.0

NOTE: This table has been supplied by the Dominion Bureau of Statistics from their material deriving from the survey of income liquid assets and indebtedness of non-farm families described and reported upon in their Reference Paper No. 80 entitled *Income, Liquid Assets and Indebtedness of Non-Farm Families in Canada, 1955*, published in 1958.

mately 30 percent in the brackets "$4,000 - $5,000" and "$5,000 - $7,000", and 46 percent in the bracket "$7,000 - $10,000", falling back to just under 40 percent in the "$10,000 and over" bracket. Moreover, at all income levels, between 5 percent and 11 percent of those who invested in at least one of savings bonds or savings deposits invested in savings bonds but not savings deposits in commercial banks. Thus, even allowing that there are many reasons for purchasing savings bonds or for making savings deposits, this evidence would not permit us to conclude that all investors who concentrate their holdings in liquid assets are insensitive to changes in relative yields. On the contrary, the evidence is consistent with the proposition that there may be a significant, if marginal, group of lower income consumer-investors who respond to changes in yield differentials.

At the upper end of the income scale, the Canadian survey gives figures only for the bracket $10,000 and over. However, within this bracket we notice that 94 percent of the spending units hold some liquid assets (including all kinds of bonds) but only 51 percent held marketable stock. Therefore, within this bracket, according to these figures, there were at least 43 percent of the spending units who held liquid assets but were not moved by considerations of yield (or anything else) to buy so much as one dollar's worth of the highest yielding marketable stock in the market. This is one way of interpreting this figure on frequency; the figure suggests that in this higher income group where one would expect sophisticated investors to be concentrated, there is a very substantial group of consumer-investors who prefer liquidity and security so markedly as to

make no or few sacrifices for yield.[55] There is however, another interpretation. At most 51 percent of the spending units in this bracket held some marketable stock and some liquid assets and it is within this group that most of the consumers who are prepared to "play the field" and invest in a wide range of assets with an eye to prospective yields are to be found. One cannot rule out the possibility that there is trading at the margins in response to changing differences in yields, but we have not a very firm idea of how many families are involved. We do know that less than 3 percent of the families had incomes over $10,000 and they received about 10 percent of the income received.[56]

What conclusions can we draw? Or what speculations do we seem to be justified in offering?

It would seem that for the bulk of consumer-investors, yields on investments are not the major consideration in investment decisions. Security, liquidity, the purchase of services, are all strong determinants of the investment patterns of these consumers, and it must be added that unknown proportions of consumer-investors are not prepared to incur the costs of allaying the ignorance which prevents full exploitation of available investment opportunities. There is reason to suppose that awareness of opportunities is more common among those with higher incomes, and the overriding emphasis on security and liquidity less common in the upper income brackets. Those with higher incomes have by virtue of their incomes a degree of security and liquidity that those with lower incomes do not have, they have more practice and experience in making investments and they are more likely to seek the advice of professional investment advisors. We do not claim to establish the point beyond all question, but inasmuch as 90 percent of the non-farm families earned less than $7,000 in 1955, and in view of the great preference for liquid assets and especially the lower yielding liquid assets among those in this income range, we feel justified in offering the speculation that the bulk of consumer-investors are motivated less by prospective yields than by other considerations in their investment decisions. The figure is probably not as high as 90 percent but it seems most likely that it is over 50 percent.

If it seems likely that most consumer-investors are less sensitive to yields than to other considerations can it also be argued confidently that these investors move most of the funds that move out of the consumer sector? The evidence would not seem to support quite so strong a speculation as this. Let us try to fix the orders of magnitude by making a few

55 We repeat that "liquid assets" in the Canadian survey figures includes *all* bonds; it is necessary to recognize therefore that of the 94 percent who held liquid assets some undoubtedly held marketable government or corporate bonds. Nevertheless, at least one-fifth of the spending units in this income bracket held savings deposits in commercial banks but held no marketable stocks. The average size of deposits among depositors was $3,000 and it may well be that the average was higher for the non-stock holders than for the stock holders.

56 The reader who wishes to consult similar data for the United States on this particular point, which appeared after Section B of this chapter was prepared, may consult the report on the 1957 Survey of Consumer Finances that appears in the *Federal Reserve Bulletin* for August 1957, at pages 878 to 901.

drastic assumptions that are obviously far too strong. For the sake of argument suppose that all investors with incomes below $10,000 are insensitive to changes in yield differentials.[57] Suppose further that the proportions of the annual flows into each class of asset emanating from this group of investors are equal to the holdings of these assets by the consumer sector. It may not be too unreasonable to suppose that consumer-investors with incomes below $10,000 pay 90 percent of insurance premiums and contributions to pension funds, and hold 90 percent of all deposits and non-marketable federal bonds,[58] and 25 percent of all the stocks, non-federal bonds and mortgages are held in the consumer sector. We calculated earlier that in the post-war years, excluding increases in claims on unincorporated business and excluding transactions in marketable federal bonds, about two-thirds of the remaining increases in financial assets were made up of deposits, savings bonds, and insurance or pension contributions. Using these assumptions and proportions we would conclude that perhaps two-thirds[59] of the funds flowing into deposits, savings bonds, non-federal bonds, mortgages, stocks, insurance companies and pension funds from the consumer sector were moved by consumer-investors who were relatively insensitive to yields on these assets. This is obviously a very rough calculation. We are not justified in supposing that all investors with incomes under $10,000 are insensitive to all yields. We do not know what proportion of stocks, non-federal bonds and mortgages are held by these investors. For these reasons and others, we cannot therefore support the strong proposition that two-thirds or even more than half of the funds moving out of the consumer sector are moved by investors who are less sensitive to yields than other considerations. But we would contend that the evidence, such as it is, suggests that this proportion may not be much below one-half.

In the course of this discussion we have suggested several bits of evidence that point to the conclusion that consumer-investors do not all consider making investments in all classes of assets. The fact that all investors do not in fact invest some proportion of their saving in each class of assets is not conclusive proof of the proposition; it is always possible to argue from such information as we have, that in spite of considering all alternatives, different groups of investors decide to restrict their investment to different groups of assets. Granting this, we nevertheless offer the speculation that such compartmentalization does exist. The concentration of liquid asset holdings in the low income groups and of stock holding in the higher groups, and the concentration of liquid asset holdings in low yielding assets are the main grounds for offering this speculation. However, we have also noted that there is strong evidence that this compartmentali-

57 If one prefers the cryptic technical language, we are assuming that in this income range investors' demands for financial assets are inelastic with respect to the yields of such assets.

58 The Canadian survey data showed that 90 percent of deposits and bonds of all kinds held by non-farm families were held by those with incomes below $10,000 and that 88 percent of insurance premiums paid by these families were paid by the same group.

59 $.9 \times 2/3 + .25 \times 1/3$.

zation is not rigid and complete. There are groups whose investments overlap those of other groups. There are some lower income investors who in fact hold liquid assets in a variety of classes. There are a few spending units in the lower income groups who invest in mortgages, corporation securities and the bonds of junior governments. There are those in the upper income groups who hold liquid assets as well as corporation securities and other less liquid investments. There is undoubtedly some marginal trading in response to changing yield differentials. Is this marginal trading significant? The question is very difficult and cannot be disposed of with the information we have so far introduced. Many of the funds invested by individuals are invested in financial intermediaries. This question of significance therefore immediately raises the question of the responsiveness of financial institutions to changes in yield differentials. We shall have to discuss this matter in later chapters and leave until the final chapter our attempt at appraising the general question of the responsiveness of investors to changing security prices and yields.

In final summary of this discussion of the reactions of consumer-investors to changing prices or yields of financial assets we may recall that we have concluded that a) the bulk of consumer-investors are relatively insensitive to yields being motivated largely by other considerations, b) a very significant proportion, perhaps one-half of the funds moved out of the consumer sector are moved by those insensitive investors, and c) groups of investors apparently restrict their investment to specific groups of assets, but these groupings overlap so that the effects of changes in the (prospective) yields of one class of asset may be transmitted by investors in the overlapping groups to the yields of other assets.

So much for consumers as investors; what of consumers as borrowers? Are consumer-borrowers aware of and sensitive to alternative costs of borrowing? Our attention must now be focused on the rates of interest paid on loans to consumers made by banks, instalment finance companies, loan companies and money lenders, retail dealers, insurance companies through policy loans, and credit unions.

Perhaps the first observation to make is that a substantial proportion of consumers having some "personal debt" have liquid assets *in excess* of their personal debts. In Section B. 1 above, we quoted figures from the recent Canadian survey of finances to the effect that in early 1956 of the 48.5 percent of all spending units with some personal debt just under one-third had liquid assets greater than or equal to their personal debts. Moreover, the proportion of those debtors with liquid assets in excess of their debts increased dramatically with income so that in the income bracket $7,000 and over, approximately one-half of the debtors were in this position.[60] There can be very little doubt that for these con-

[60] See above Table 5.20.

sumers, the rates of interest on their debt were considerably in excess of the rates they were earning on their liquid assets.

There must be many instances in which the borrower has no idea of the rate of interest he is paying for his money, or no expertise in converting charges required on different classes of debt to a common basis for purposes of comparison. How many borrowers through the personal loan department of one of the Canadian banks knew in 1953 that they were paying 9.32 percent for their money?[61] How many borrowers from small loan companies and licensed money lenders know the rate they are paying? And even if they can compare one lending company's charges with another's how inclined are they to do that? The Superintendant of Insurance who administers the Small Loans Act in Canada feels "borrowers are not very discriminating"; their decision to approach one lender rather than another "is more a matter of habit than anything else".[62] Very often financing arrangements are part of a "package deal" and it is difficult to separate financing costs from other costs so as to permit calculations of the costs of alternative methods of finance. In the realm of automobile finance for example the price of the car is not unrelated to the method of finance — the purchaser makes a "deal" which involves the car, its price, the finance charges and the other terms of the loan contract. It seems very doubtful whether many car buyers who "finance" their purchases shop around and consider a variety of alternative methods of finance and compare the rates of interest payable under the various alternatives.[63] The true rate of interest paid on a policy loan is surely a very complicated calculation. One wonders how general is the knowledge of the rates of interest charged by the various large department stores and mail order houses on the various types of financial accommodation they offer. It is of course necessary to make exceptions; there are enquiring and calculating consumers who will seriously choose their sources of funds in the light of such knowledge as they can gain of the rates of interest charged by each source. But without being able to prove the point, there seems to be abundant evidence that the bulk of credit supplied to consumers is made available without the consumers having clear, full knowledge of the alternatives available to them and the costs of each. Certainly the rates of interest charged by various consumer lending agencies are not advertised as such, and certainly any consumer would be required to do a consider-

61 How could they? The fact only came out in a statement by the general manager of the bank before the Banking and Commerce Committee of the House of Commons. See "Minutes of Proceedings and Evidence", Standing Committee on Banking and Commerce, House of Commons, 1954, p. 1102, Table 10.

62 "Minutes of Proceedings and Evidence", Standing Committee on Banking and Commerce, House of Commons, 1956, p. 568. Also "I am afraid that borrowers are not as selective or as discriminating as they might be. Once a connection has been established, I think they are prone to return to the same lender", *Ibid.*, p. 535.

63 "A recent survey of 311 families in the cities of Champaign and Urbana, Ill., indicated that, "approximately two-thirds of consumers of instalment credit did not know the amount of the carrying charge or interest rate on their most recent instalment purchases".
Quoted from Jean M. Due, "Consumer Knowledge of Instalment Credit Charges", *Journal of Marketing*, Vol. XXX, p. 164, in *Consumer Instalment Credit*, Part I, Vol. I, p. 60, published in 1957 by the Board of Governors of the Federal Reserve System.

able amount of rather complicated arithmetic in order to be able to compare the costs of alternative methods of obtaining finance.

c. Other regulators

Thus far in our review of the subject of consumers and the regulators of the flows of funds we have discussed tax regulators and price regulators. We now refer very briefly to other regulators. In our examination of prices or yields as regulators we came to the conclusion that the bulk of consumer-investors or consumer-borrowers were motivated less by yields of assets and costs of borrowing than by other considerations. These other considerations are myriad and we can only deal briefly with a few of them.

First of all is the fact that significant proportions of consumer saving and of consumer borrowing are undertaken in connection with "package deals" as we have called them. The purchaser of insurance is more concerned with obtaining protection than with the rate of interest earned by the insurance company on his money. The terms of the insurance contract, the annual or weekly premium, will for many be a principal consideration. The contributor to pension funds and the purchaser of group insurance often has no alternative but to make these commitments if he is to remain with his employer. The buyer of durable goods who resorts to borrowed money to finance his purchases is in a very large number of cases likely to be more sensitive to changes in the monthly payments which reflect changes in maturity and to changes in down payment requirements than to the rate of interest being charged to him.

Advertising is a significant factor regulating the directing of consumer saving and borrowing. Some classes of investment are advertised more widely and effectively than are others. Savings bonds and life insurance are perhaps the most effectively advertised classes of investment available to consumers, with savings deposits running a close second. The services of finance companies and money lenders are also widely advertised either directly by the companies or by the sellers of goods who use other instalment credit.

Differences in the collateral requirements imposed by some lenders undoubtedly affect borrowers' choices of creditors. Costs of shifting investments (either the broker's fees, or simply the trouble involved in deciding upon and making shifts) undoubtedly impede some consumer-investors and lead them to choose highly liquid assets as outlets for their saving. In some instances the costs of shifting are very high indeed. The cash surrender values of insurance policies are ordinarily not high enough to warrant shifting funds from one insurance company to another or from insurance to another class of investment. Of course money invested in some pension funds is irretrievably "locked in".

Finally, we must refer again to characteristics of assets such as liquidity, security and associated characteristics (for example, the privilege of writing cheques against savings accounts or the privilege of exercising a vote at shareholders' meetings) which, though they may be reflected to some degree in the yields of the assets nevertheless appear to have some independent effect on investors' decisions.

2. *Finance and loan companies and the regulators of the flows of funds*

a. Regulation through legislation

There is no act of the Canadian parliament that regulates the activities of instalment finance companies, though these companies were affected by consumer credit restrictions imposed during the war and at the time of the Korea crisis under the Emergency Powers Act.[64] Money lenders and loan companies are subject to limited regulation under the Small Loans Act.

Under the British North America Act the federal parliament has the power to legislate with respect to rates of interest. It is on this provision of the British North America Act that the authority to enforce the Small Loans Act rests. The Small Loans Act limits the rate of interest that may be charged by lenders on loans of $1,500 or less, and requires all lenders of such amounts who charge more than 1 percent per month on any unpaid balances, to be licensed.[65] The schedule of maximum rates allowed under the Act varies with the size and the term of the loan, the maximum generally being lower for larger loans. The schedule is shown in Table 5.33.

Before the 1956 revision of the Small Loans Act the four small loan companies (incorporated by special act of the Canadian parliament) were not permitted to issue bonds, debentures or other securities for money borrowed. The Superintendent of Insurance who is responsible for administering the Act disclosed to the Banking and Commerce Committee of the House of Commons at the hearings on the 1956 revision that he had made it a condition of licensing *all* money lenders that they agree to refrain from issuing debentures.[66] In the revision of the legislation the prohibition against the issue of debentures by small loan companies was removed and presumably the Superintendent will now feel obliged to relax his own private restrictions against licensed money lenders generally. Under the Act small loan companies are not allowed to accept money on deposit; there is no specific mention of the powers of other money lenders in this respect.

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64 At least three provinces have legislation on their statute books concerning conditional sales agreements. These provinces are Alberta, New Brunswick and Quebec. The Alberta legislation is concerned to ensure that carrying charges are clearly stated. In Quebec and New Brunswick the legislation deals with minimum down payments and the duration of payments; the Quebec legislation also deals with charges. There is some question as to the competence of the federal authorities in this field. There is no doubt however that they have the right to regulate banks, interest, bills of exchange and to legislate for the peace, order and good government of the country. Presumably if the federal authorities wished to regulate in this field they could base test legislation on one or other of these provisions.

65 Before the revision of the Act in 1956, the Act regulated charges on loans only up to $500. The situation now is that there is no limitation of charges on loans in excess of $1,500.

66 See "Minutes of Proceedings and Evidence", Standing Committee on Banking and Commerce, House of Commons, Canada, 1956, pp. 447 and 698-9.

Table 5.33

SCHEDULE OF MAXIMUM LOAN COSTS PERMITTED UNDER THE SMALL LOANS ACT

Size of loan (unpaid balance in dollars)	Maturity in months	20 or under	21-30	Over 30
			(Percent per month)	
$0- $300	—	2.0	1.0	1.0
301- 500	—	1.0	1.0	1.0
501-1,000	—	1.0	1.0	1.0
1,001-1,500	—	0.5	0.5	1.0

b. Price regulators and the finance companies

Let us think of the reactions of finance companies as seekers of funds to changes in the relative costs of obtaining money. We observed in Section B.2 of this chapter that finance companies borrow from banks, borrow in the very short-term market (on secured notes with less than one year to maturity), borrow in the longer term market using secured notes and subordinate debentures and obtain funds from the issue of preferred and common shares. Thus the companies customarily incur a wide range of liabilities, and if they are sensitive to changes in the costs of borrowing there will be shifts in their sources of funds reflecting these changes in relative costs.

Of course costs will not be the only considerations governing the companies' selection of sources for their funds. We have argued that the companies prefer to operate with high ratios of short to long-term debt, for example, so that even if short-term rates of interest rise substantially relatively to long-term rates, this preference dictated by the character of their assets will limit the degree to which they will move into the long-term market. The relative states of development of the short-term market and the long-term market for the finance company securities is another factor affecting the decisions of the companies, and there are yet others we shall refer to in the following. As usual, the point we shall be particularly interested in is whether at the margin there is shifting of sources in response to changing costs of funds.

Before entering into the detail of the discussions of these responses, let us examine the record of the rates of interest paid by finance companies on short and long-term borrowings. The record is difficult to piece together; there are no official statistics made available to the public.[67] For this study we have not tried to exhaust every available scrap of information; considerably more research is needed on the matter. We consulted records of the Financial Post Corporation Service to discover the yields at time of issue of the publicly issued secured notes (with more than one year to

67 In the United States the supply of statistics in this field is much better than in Canada.

Table 5.34

YIELDS ON SELECTED SECURITIES ISSUED BY INDUSTRIAL ACCEPTANCE CORPORATION LIMITED AND TRADERS FINANCE CORPORATION LIMITED

		Short-term notes days to maturity										Debentures[a] years to maturity				
		30-89		90-179		180-269		270-364		365		15	16	18	19	20
		TFC	IAC	TFC	IAC	TFC	IAC	TFC	IAC	TFC	IAC	TFC	TFC	IAC	IAC	IAC
1948	May 1											4.00				
1950	Apr. 1														4.00	
	Oct. 1												4.00[b]			
1951	Mar. 1														4.11	
	June 1									3.50						
	June 29		3.00		3.25		3.50		3.50		3.50					
	Oct. 1												4.50			
1952	May 15												5.25			
	July 2													5.13		
	Nov. 5		3.00		3.50		4.00		4.00		4.00					
	Nov. 15												5.35			
	Dec. 18			3.50		4.00		4.00		4.00						
1953	Jan. 2														5.25	
	Apr. 15												5.09			
	May 1												4.75[b]			
	July 2															5.50
	July 29		3.00		3.50		4.00		4.00		4.25					
	Aug. 27			3.50		4.00		4.00		4.25						
	Oct. 1												5.50			
1954	Feb. 1															5.25
	Feb. 8-9		2.75	3.25	3.25	3.75	3.75	3.75	3.75	4.00	4.00					
	Mar. 22		2.50		3.00		3.50		3.75		4.00					
	Mar. 29		2.25		2.75		3.25		3.50		3.75					
	Apr. 29			2.75		3.25		3.50		3.75						
	May 7		2.00		2.50		3.00		3.00		3.50					
	May 10			2.50		3.00		3.00		3.50						
	May 17		1.75		2.25		2.50		2.75		3.00					
	May 25			2.50		2.75		3.00		3.25						
	July 12			2.25		2.50		2.75		3.00						
	Oct. 1															4.50
	Oct. 12		1.50		1.75		2.00		2.25		2.25					

Table 5.34

YIELDS ON SELECTED SECURITIES ISSUED BY INDUSTRIAL ACCEPTANCE CORPORATION LIMITED AND TRADERS FINANCE CORPORATION LIMITED—Cont'd.

		Short-term notes Days to maturity										Debentures[a] years to maturity				
		30-89		90-179		180-269		270-364		365		15	16	18	19	20
		TFC	IAC	TFC	IAC	TFC	IAC	TFC	IAC	TFC	IAC	TFC	TFC	IAC	IAC	IAC
1955	Feb. 21		1.50		1.75											
	Feb. 25	1.25		1.75		2.00		2.25		2.25						
	May 2	1.50		1.75		2.00		2.25		2.25						
	July 14		1.50		1.75		2.00		2.00		2.00					
	Aug. 12		1.75		2.00		2.25		2.25		2.25					
	Oct. 14		2.00		2.25		2.50		2.75		2.75					
	Oct. 17	2.25		2.50		2.75		3.00		3.00						
	Oct. 20		2.25		2.50		2.75		3.00		3.00					
	Nov. 28		2.75		3.00		3.25		3.25		3.25					
	Dec. 7		2.75		3.25		3.75		3.75		3.75					
	Dec. 12	2.75		3.25		3.75		3.75		3.75						
	Dec. 28	2.75	2.75	3.00	3.00	3.50	3.50	3.75	3.75	3.75	3.75					
1956	Feb. 13		2.75		3.00		3.25		3.50		3.50					
	Mar. 12	2.50	2.25	2.75	2.50	3.25	3.00	3.50	3.25	3.50	3.25					
	Mar. 15											4.75				
	Apr. 11		2.75		3.00		3.25		3.50		3.50					
	Apr. 23	3.00	3.00	3.25	3.25	3.75	3.75	4.00	4.00	4.00	4.00					
	Apr. 30		3.25		3.50		3.75		4.00		4.00					
	May 28	3.25		3.50		3.75		4.00		4.00						
	June 1														5.25	
	June 20	3.50	3.50	3.75	4.00	4.00	4.25	4.25	4.25	4.25	4.25					
	July 16		3.25		3.75		4.00		4.25		4.25					
	July 24	3.50		3.75		4.00		4.25		4.25						
	Aug. 20	3.75	3.50	4.00	4.00	4.25	4.25	4.50	4.25	4.50	4.25					
	Sept. 15												5.00			
	Oct. 24	4.00	3.75	4.25	4.25	4.50	4.50	4.75	4.75	4.75	4.75					
	Nov. 9		4.00		4.25		4.50		4.75		5.00					
	Nov. 15	4.00		4.25		4.50		4.75		5.00						
	Nov. 30		5.00		5.25		5.50		5.50		5.50					
	Dec. 5	5.00		5.25		5.50		5.50		5.50						
1957	Jan. 15															5.75
	Feb. 11-12	5.00	5.00	5.25	5.25	5.50	5.50	5.75	5.75	5.75	5.75					
	Mar. 1												5.75			

a Yields quoted are yields at time of issue of debentures outstanding at end of February, 1957.
b Convertible debentures.
SOURCES: Debentures: Financial Post Corporation Service — cards on IAC and TFC.
Short term notes: Greenshields & Co. Inc., McLeod Young Weir & Company and Wood Gundy & Company Limited. The helpful co-operation of these companies in supplying information is gratefully acknowledged.

maturity) and debentures of Traders Finance Corporation Limited and Industrial Acceptance Corporation Limited that were outstanding at the end of 1956 or early 1957, and we contacted investment dealers who assist in placing the short-term notes of these and other companies to obtain the yields of these securities at time of issue for selected companies. This material is presented in Chart 5.4 and Table 5.34 but our record does not go back to the beginning of the post-war period. Observations on long-term issues are more frequent in the latter part of the period we have covered. We have no information pertaining directly to two of the largest companies in Canada, namely, General Motors Acceptance Corporation and Canadian Acceptance Corporation; these companies are subsidiaries of United States firms. We have not dug out the information on the smaller companies. Finally, we do not know what rates the banks charge on loans to finance companies, though one suspects that if it is not the prime rate on commercial loans it must be very close to it.

There can be no doubt that the yields of the securities issued by the finance companies are flexible in the sense that they cannot always borrow at the same rate. Though in the period covered by the record that we have assembled, the issue of debentures was more sporadic than the issue of short-term notes, the yields at issue of these debentures reflect the movements in the theoretical yield on Government of Canada bonds. The most dramatic development in the sources of funds for finance companies in the post-war period has been, as we have described, the use of the short-term note maturing in less than one year. Paced by similar earlier developments in the United States and assisted in some degree by official efforts in Canada to widen the market for treasury bills, the use of this instrument has advanced to the point where it is now a principal source of funds for the larger companies. Throughout the post-war years the rates on short-term secured finance company notes maturing within 179 days have been below the prime bank rate; this fact has undoubtedly encouraged the companies to use and develop the market in notes. We would draw particular attention to the movement in yields of these notes maturing within 90 to 179 days, relative to the movement in tender rates on 90-day treasury bills. During the period of falling yields from late 1953 through 1954, the yields of finance company notes fell much more than yields of treasury bills and the spread between these two securities narrowed considerably as a consequence. In the period of rising yields beginning in the middle of 1955, again the change in yields of finance company notes greatly exceeded the change in treasury bill yields. While the yield on treasury bills rose from just below 1 percent in February 1955 to about 3.75 percent at February 1957, the yields on 90-179-day finance company notes rose from 1.75 percent to 5.25 percent in the same period, doubling the spread.

What is of especial interest in this chart for us, is that the spread between the yields on the debentures and the short-term notes widened

in the period of falling yields as the short-term yields fell more than the long-term yields and narrowed again in the subsequent two years as short-term yields rose very sharply and considerably more than long-term yields. In this period the spread narrowed from something of the order of 3½ percentage points to one-half of one point. How did the companies react to these changing spreads?

From the end of 1953 to the end of 1954 the changes in selected outstanding liabilities of six of the largest companies in Canada are shown in Table 5.35.

The decline in outstanding paper in this year amounted to one-eighth. In the face of this decline in their business these six large finance companies reduced their short-term indebtedness by three-eighths and increased their long-term indebtedness, their capital stock outstanding and their surplus by 18 percent.

One might suppose that in the face of a decline in business, finance companies might be inclined to reduce their indebtedness, and since in 1954 long-term yields declined to a lesser degree than short-term yields they might be inclined to reduce their long-term indebtedness rather more than their short-term. This however, did not happen. What were the extenuating circumstances? We do not pretend to know fully. It is certainly easier to run off short-term debt than long-term debt, in the short run

Table 5.35

SELECTED LIABILITIES OF SIX OF THE LARGEST INSTALMENT FINANCE COMPANIES[a]

	End of 1953[b]	End of 1954[b]	Change	
	Millions of dollars	Millions of dollars	Millions of dollars	%
Demand bank loans	172.3	92.8	— 79.5	— 46.1
Short-term notes	218.7	157.9	— 60.8	— 27.8
Sub-Total	391.0	250.7	—140.3	— 35.9
Secured notes (over 1 year to maturity)	181.3	211.4	30.1	16.6
Debentures	53.6	68.6	15.0	28.0
Sub-Total	234.9	280.0	45.1	19.2
Preferred stock	19.6	21.0	1.4	7.1
Consumer stock	34.0	40.1	6.1	17.9
Sub-Total	53.6	61.1	7.5	14.0
Earned surplus and capital surplus	23.6	28.0	4.4	18.6

a From worksheets of the NTA.

b The figures for Laurentide Acceptance Corporation pertain to the end of October.

of a year! But this cannot account for the *expansion* of long-term debt. Long-term debt expanded in 1954 though by a smaller amount and by a smaller percentage than in 1953. In 1952, the year in which credit restrictions were removed and outstanding wholesale and retail paper of the six large companies expanded by nearly 60 percent, the ratio of short-term funds (bank loans and short-term notes) to funded debt (long-term notes and debentures) jumped from 1.29 to 3.53. In 1953, this ratio was brought down to 1.66. It may have been felt by many companies that this ratio was still high; in any event in 1954 it was brought down to just under 0.90, which by comparison with these ratios in previous years looks low. However, if the companies felt that the decline in business in 1954 was likely to be short lived and thus the post-war expansion of their assets would soon be revived it would make sense for them to borrow in the long market at the more favourable yields of 1954. It is also a fact that the market was prepared to allow slightly more favourable call privileges to the companies on their debenture issues in 1954 than in 1953. We do not know the details of the operations of the American-owned companies; it appears they increased their long-term indebtedness, but whether the issues were placed in Canada or the United States we do not know. We do know that the four largest Canadian companies increased their long-term indebtedness and reduced their short-term obligations and it is probable that most if not all of their long-term financing was done in the Canadian market. We may conclude with respect to 1954 that the companies were sensitive to changes in yield differentials, but that their reactions were conditioned by an effort to readjust their ratio of short to long-term debts in the light of expectation of a quick recovery of their business and a resumption of the rising trend which characterized it in the earlier part of the post-war period.

What of the period of rising yields, when yields in both markets rose, the short yields rising the more rapidly, to the point where yields on 270-day secured notes were the same as yields on 16 or 20-year subordinate debentures? One might have expected that at the beginning of the period of rising yields, as their assets expanded, the companies would have borrowed largely in the short market especially as they had already built up their long-term position but that as yields there rose they would move progressively more into the long-term market and that as demands in that market expanded, yields would be pushed up and other features of loan contracts moved against the borrowers.

We do not have the figures for all of the larger companies for this period, but the figures for Industrial Acceptance Corporation and Traders Finance Corporation are shown in Table 5.36.

It is clear that as business began to expand in 1955, financing was arranged predominantly in the short-term market through bank loans and short-term notes. It is also clear that the relative importance of funded

Table 5.36

SELECTED LIABILITIES OF TWO CANADIAN FINANCE COMPANIES

	End of 1954	End of 1955	End of 1956	Change 1954-55		Change 1955-56	
	Millions of dollars			Millions of dollars	%	Millions of dollars	%
Industrial Acceptance Corporation Limited							
Short-term notes and bank loans	81	150	201	69	85	51	34
Funded debt	97	102	122	5	5	20	20
Capital stock	23	32	42	9	39	10	31
Traders Finance Corporation Limited							
Short-term notes and bank notes	48	94	122	46	96	28	30
Funded debt	83	80	105	—3	—3.5	25	31
Capital stock	20	22	22	2	10	0	0

debt financing was much greater in 1956 than in 1955. Whereas in 1955 there was very little increase in funded debt, and a large increase in short-term obligations, in 1956 there was a substantial increase both in funded debt and in short-term debt. In 1956 the finance companies drew from the long and short markets (including banks) roughly equal volumes of funds, though perhaps still somewhat more in short-term funds.

Referring especially to the period 1953 to 1955 a writer on experience of sales finance companies in the United States reports that "when central bank restraint is imposed on a buoyant economy — when both business and consumer demands for funds are strong — the sales finance companies tend to strengthen and hasten the impact of monetary policy on the capital market. They do so by shifting the bulk of the increased demand for consumer credit to the long-term market".[68]

In Canada, in 1955 to 1956 it is not true that the "bulk" of sales finance company borrowing was shifted to the long-term market, though there was a substantial shift. As usual, the factors determining practice are many and complicated. Perhaps it should be remembered however that the most significant feature in the financing of these companies in the post-war period was the rise in the sale of short-term notes to non-bank investors. Whereas there were no such sales in the early post-war years, they became later a most important source of funds for the companies. The dynamic effect of the development of this market by the companies tints the record of the years 1955 and 1956 as well as of earlier years.

68 Eli Shapiro and David Meiselman, "The Financing of Consumer Credit Institutions" in *Consumer Instalment Credit*, Part II, Vol. I, Board of Governors of the Federal Reserve System, 1957, p. 305.

It is quite conceivable that in 1956 the switch to the long-term market was limited by the possibilities of developing yet untapped corners of the market for short-term paper. Moreover, we have seen that redemption privileges on long-term issues were restricted considerably after mid-1956. It is also possible that the market for long-term money was rather tighter in Canada than in the United States. We know that the Industrial Acceptance Corporation went to the United States market in October 1956 for "7-year money" and again early in 1957 for "20-year money". Some of the shift to the long-term market noted in the balance sheets we have reviewed was therefore a shift not to the Canadian but to the American long-term market. We do not know the details of such operations for the large American companies in Canada.

c. Regulation through central bank control

The central banking authorities in Canada have sought to bring pressure to bear on the instalment finance companies through their general operations in the open securities market, through selective controls and through exhortation of the companies and indeed the public (through the Annual Report of the Bank).

Our review of the responses of the companies to changes in yield differentials after 1953 will perhaps illustrate the effect of central bank pressures exerted generally through their open market operations. For example, in 1955 and 1956 as we have just seen, short-term yields in Canada rose much more than long-term yields, but the companies, while they reduced the rate of increase in their short-term borrowing, increased their long-term borrowings both in Canada and in the United States and the rate of increase in their assets was not reduced by any increases in the costs of the money they borrowed. This applies particularly to the larger companies. The writer cannot claim to have examined the changing condition of the smaller companies in the period of tight money; it is a fact however that they rely more on the banks for their funds and have fewer opportunities for exploiting alternative sources such as short-term or long-term markets in Canada and the United States and the resources of parent companies abroad than do the larger companies.[69] However this may be, it is hard to argue that in 1955, 1956 and early 1957, any propensity of finance companies to substitute long-term money for short-term money substantially facilitated the transmission of the impact of central bank policy from the shorter maturities to the longer maturities in the capital market.

On two occasions in the post-war period the finance companies were specifically affected by the agreements made between the chartered banks and the Bank of Canada. Part of the 1951 agreement fixing a ceiling on bank loans was a clause to the effect that loans made on the security of

[69] See Bank of Canada, *Annual Report to the Minister of Finance for the Year, 1956*, p. 35.

instalment finance paper would not be allowed to increase. In 1956 as we have noted in our earlier chapter the banks did not increase their lines of credit to finance companies, but the unused lines available must have been large, as loans to instalment and other finance companies increased over 28 percent.

The Bank of Canada undertook in 1956 to hold discussions with the sales finance companies with a view to establishing a voluntary control that would permit further increases in instalment credit outstanding. These discussions did not lead to any agreement. The Governor of the Bank reports that "In November following the failure of the companies concerned to agree on measures to limit the expansion of their lending, the banks took the further step of changing authorized credit limits for the larger companies so that no further increase would be permitted to bank loans to such companies beyond the maximum point reached up to that time, except on a purely temporary basis".[70]

In late November 1956, the federal government issued 2¼ percent 6-month bonds at $99 1/8 to yield 4.03 percent and 2¼ percent 1-year bonds at $98, to yield 4.31 percent. The Bank of Canada is the fiscal agent of the treasury and is its advisor on fiscal matters and it has been strongly suspected that one objective of this issue was to increase the competition offered by federal obligations to the short-term notes of finance companies.

When the *Annual Report* of the Bank of Canada appeared early in 1957 it contained a frank statement that the finance companies were not responding to central bank policies and that the continued expansion of instalment credit was thwarting monetary policy. In part the statement reads as follows:

> "Finance companies carry on an operation which is in all essentials banking, but are not restrained by changes in monetary conditions. They are able to compete for deposits through the sale of short-term paper in the money market and to raise funds in securities markets, paying any necessary rate of interest for these purposes, for increased interest costs do not appear to deter consumer borrowing."[71]

We need not debate whether sales finance companies are banks though the point has profound constitutional implications. Neither need we debate the contention that (within limits, presumably) consumers are not deterred by increased interest costs, especially if their effects are mitigated by extensions of the terms of the loans. We do feel however, that it would be difficult to forecast what effects restrictive monetary policy might have on instalment finance companies in a period of tight money a decade or even five years hence on the basis of Canadian experience in the years 1956 to 1957. The period we have just passed through was rather special; it

70 Bank of Canada, *Annual Report to the Minister of Finance for the Year, 1956*, p. 9.
71 Bank of Canada, *Annual Report to the Minister of Finance for the Year, 1956*, p. 26.

was a period in which the companies were in the process of developing their short-term sources of funds. It is distinctly ironical that to a considerable degree this development was fostered and encouraged by the Bank of Canada. The singling out of finance companies for special mention in the loan ceiling agreement of 1951 was a warning to the companies that banks might be an uncertain source of funds in the future, and the reduction in bank loans in this year was matched by a pronounced expansion of the issue of short-term notes to non-bank lenders. Moreover, the central bank's encouraging of the development of the market in treasury bills must have assisted the finance companies in selling their short-term notes. Once a corporation treasurer has learned to buy a federal treasury bill, it takes very little more nerve to buy a higher yielding finance company note especially when at the time of sale the maturity day can be fixed to the buyer's specifications. But irony aside, in the years 1955 to 1957 this market was still being developed in Canada. When it has matured, when, that is, all the likely buyers have become used to the idea of buying these securities, and when the practice of trading in outstanding issues develops, the market may become sensitive to pressures, and in particular the finance companies may be more prone to shift to the longer term market under pressure in the short-term market. If such a condition develops these companies would become more effective as a conduit through which the impact of central bank pressure could flow from markets for certain classes of security to the market for other classes.

The period through which we have just passed was special also in that a great many consumers were just learning to use instalment credit. This dynamic growth superimposed on a cyclical upswing in demand for this type of accommodation accentuated the difficulties of control. As the Board of Governors of the Federal Reserve System have put it: "The volatility of consumer instalment credit in the past was to some extent related to its rapid growth. If future growth is slower, the potential instability of this factor may be contained within tolerable margins".[72]

Even so, two problems would remain; one is the ability of the finance companies to pass increased costs on to consumers. If our policy under full employment of resources is to encourage interest rates to rise in order to curtail the increase in demands for goods that leads to higher prices, the policy is bound to be frustrated to some degree if consumer-borrowers are not deterred by the rising cost of money. The second problem is the speed with which monetary policy might have its effects. This is a general problem of monetary policy and not limited to its specific effects in finance companies. There must remain some doubt whether the companies themselves are sufficiently sensitive to the effects of changes in interest costs on their profit positions to enable them quickly to transmit the effects of changes in monetary policy to the market for consumer credit.

[72] "Regulation of Consumer Instalment Credit". Views of the Board of Governors of the Federal Reserve System (as of May 24, 1957), *Federal Reserve Bulletin*, June 1957, p. 648.

D. Concluding Observations

In this chapter we have reviewed an array of facts covering the saving and financial transactions of consumers. We have discussed the regulators of the flows of funds into and out of the consumer sector. We have described aspects of the operations of instalment finance companies and referred to other institutions prominent in the field of consumer finance. Let us conclude this discussion with a very brief reflection on consumer finance and particularly consumer finance and the price system.

Canadian consumers are rather high savers as judged by the standards of other countries. They have shown themselves willing to save both through tax payments and otherwise. Canadian consumers contribute to the social objectives of their governments through the payment of taxes and the purchase of government securities and by saving beyond this they contribute to the support of free market enterprise. Individuals are important direct suppliers of mortgage money and they directly commit substantial amounts of capital to unincorporated business and to other business.

The flow of individual saving to business is largely indirect, through financial intermediaries. But individuals in their own right are the largest domestic source of equity capital for Canadian business apart from business itself. Even so only a small proportion of individual investors invests directly in business enterprise, and it is to an even smaller proportion that a very great many new or small or risky concerns must look for their equity capital. We shall discuss these and other aspects of the financing of business in Chapter 6 below.

We have found that for the vast bulk of consumer-investors, yields of investments are not the major consideration in investment decisions, and that a large proportion of the funds moving out of the consumer sector — perhaps nearly one-half — is moved by consumer-investors who are relatively insensitive to yields. But even though considerations of security, liquidity, and convenience, to mention a few, motivate consumer-investors more than do considerations of yield, nevertheless there are consumer-investors who pay a great deal of attention to yields. Even though the majority of these latter investors are found in the upper income groups they are not found exclusively there. Broadly speaking, consumer-investors are compartmentalized, with particular groups of investors confining their holdings to particular classes of assets. But there is also some overlapping of groups and some overlapping of the classes of assets they hold. Thus there is some reason to suppose that "at the margins" there is shifting of portfolios in response to changes in yield differentials. Granting this, one must conclude that the capital market would be an even more effective administrative device if more consumers were more sophisticated as investors. The promotion of this kind of sophistication is not easy. There are some possibilities of promoting it on a group basis by encouraging

arrangements for the pooling of consumers' funds and the committing of them to the administration of professional investors who are not bound by overriding institutional considerations. There are signs of awakening interest in such pooling arrangements in Canada. It is claimed by some investment dealers that the promotion of the sale of Canada Savings Bonds, by giving individuals the experience of owning a security, albeit one encashable at par at any time, has been of assistance in encouraging individuals to acquire other types of financial investments.

The volume of consumer credit outstanding has risen an enormous amount in the post-war period. This growth is viewed with alarm by many. For some, the growth in consumer credit is seen as morally wrong. We shall not pause long over this idea — a very strange one indeed in an economy that is so largely geared to credit. It is sometimes contended that the growth in consumer debt has imposed an intolerable burden on consumers. This is a very slippery idea, subject to a variety of interpretations. The whole matter has recently been analyzed most effectively, in our opinion, in a chapter of the Federal Reserve Board's study: *Consumer Instalment Credit,*[73] and we therefore do not propose to discuss it exhaustively here.

We are however concerned with one aspect of this matter. This is the burden imposed on the economy by the consumer's ignorance of the costs of the money he borrows. We have contended in this chapter that such ignorance is very widespread. We have also contended that one of the reasons finance companies did not respond to the pressures of tight money was because they could, to some degree at least, pass higher interest costs on to the consumer in the form of higher charges. This was done in very large measure by lengthening the terms of the loans as charges were raised so that the increase in monthly payments could be kept to modest proportions.

It may be that even if consumers know and appreciate the rates of interest they are paying, they will still pay even very high rates. If so, the price system must be said to allocate the funds and the real resources they command to those willing and able to pay for them and this is the essential function of the price system. But there are reasonable grounds for doubt that there are no attainable limits to the rates of interest consumers will pay for borrowed funds if they are fully aware of the charges imposed on them. And if consumers are led, through ignorance of the facts, to borrow more than they would otherwise do, a misallocation of resources results, and, under conditions of excessive demand for resources, support is given to the forces of inflation.

Perhaps, in the future we shall have to resort to specific measures to control the sources of funds to finance companies in periods of inflation.

[73] Board of Governors of the Federal Reserve System, *Consumer Instalment Credit,* 1957, Part I, Vol. I, Chapter 10, entitled "The Burden of Consumer Debit", pp. 189-204.

We have suggested that given the special circumstances the inflations so far experienced in the 1950's — rapid growth of the practice of using consumer credit and the concomitant process of developing new sources of funds for the finance companies — it is difficult to forecast how effective general monetary pressures may be in restraining consumer credit in the future. We are not inclined, therefore, to urge immediate legislative action which would give federal authorities direct control over the amounts that finance companies may borrow or the specific uses to which they put their funds (such as cash reserves, for example).[74] But we are of the view that there is one form of legislation which is as desirable in periods of inflation as in other periods, whose effects would be wholly salutary both in assisting the price mechanism in the performance of its essential function and in controlling inflation, and which is apparently within the competence of the federal parliament. This is legislation designed to ensure that those institutions such as instalment finance companies, loan companies, money lenders, banks and retail dealers, which extend credit to consumers, state the rate of interest being charged clearly and in such form as will permit consumers readily, without elaborate calculation, to compare the rates charged by different lenders. The price system and monetary policy which works through the price system, cannot work if prices are not known generally. Advertising in clear unequivocal terms of rates of interest being charged on loans to consumers would facilitate the working of the price system and of monetary policy in the realm of consumer credit and consumer transactions generally. It would appear that legislation is needed to induce such advertising of the rates.

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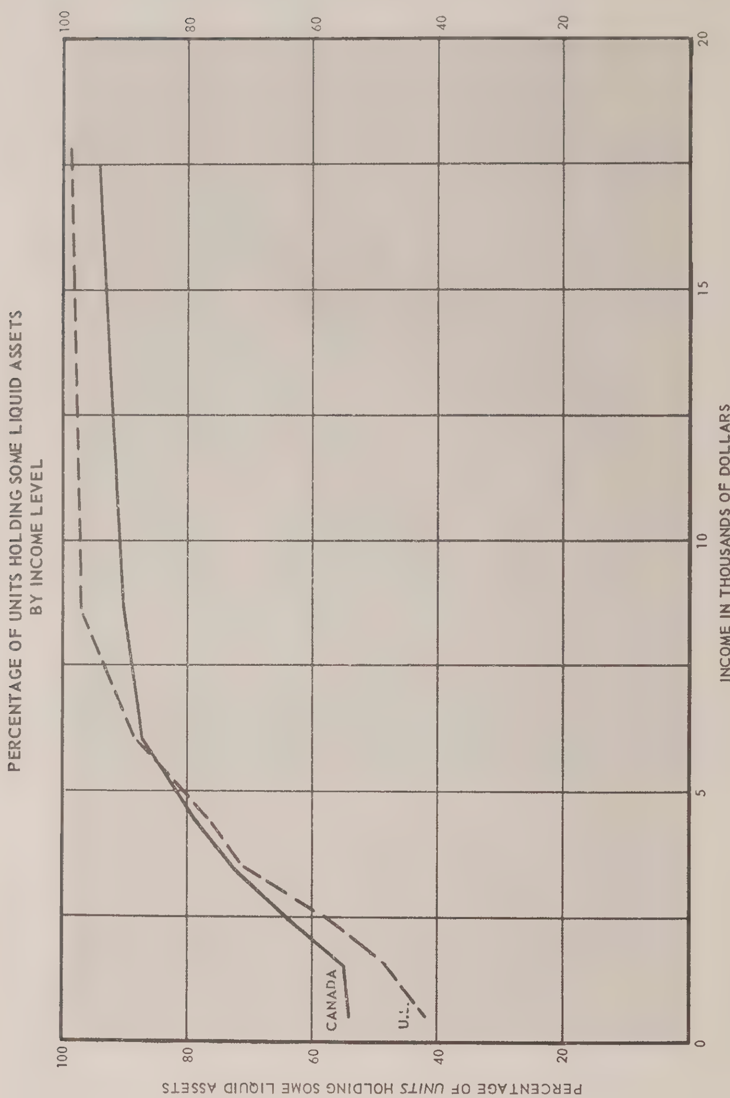
74 As a relevant matter of interest we record the following statement made by the Board of Governors of the Federal Reserve System in May 1957:
"... The Board of Governors believes that a special peacetime authority to regulate consumer instalment credit is not now advisable. The Board feels that the broad public interest is better served if potentially unstabilizing credit developments are restrained by the use of general monetary measures and by the application of sound public and private fiscal policies". Printed in the *Federal Reserve Bulletin,* June 1957, pp. 647-48, esp. p. 648.

Chart 5.1

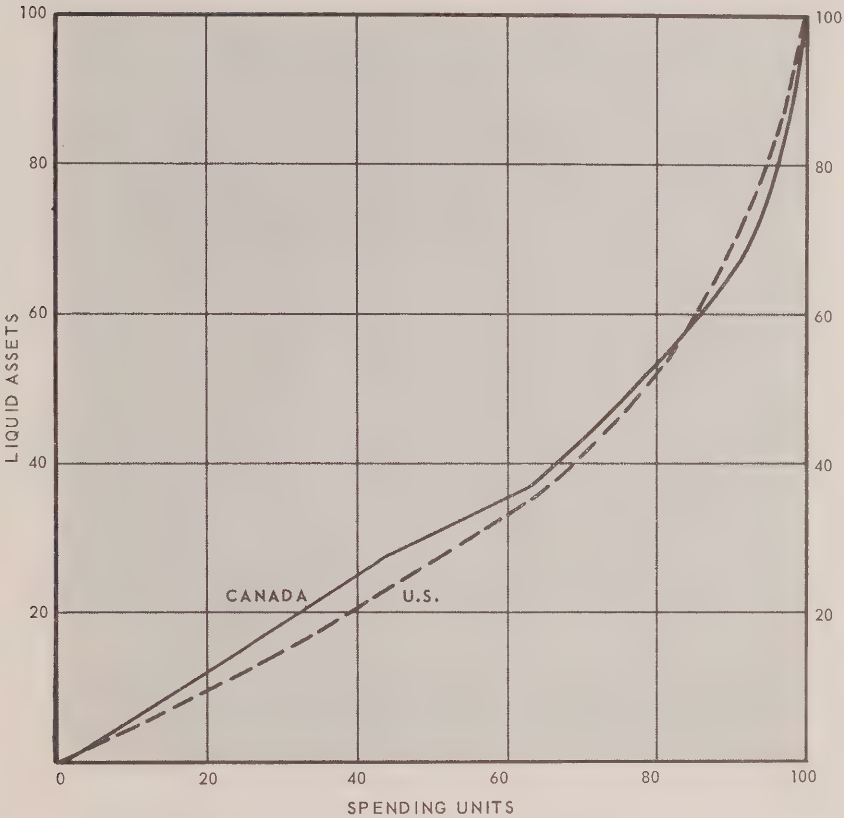


Source: Table 5.11

Data are plotted at mid-point of income range except in the "over $10,000" class in which the figure is plotted against average income which for Canada was $17,480 (D.B.S. Reference Paper No. 80, Table 1) and for the United States was $17,820 (*Federal Reserve Bulletin*, June 1956, p.567).

Chart 5.2

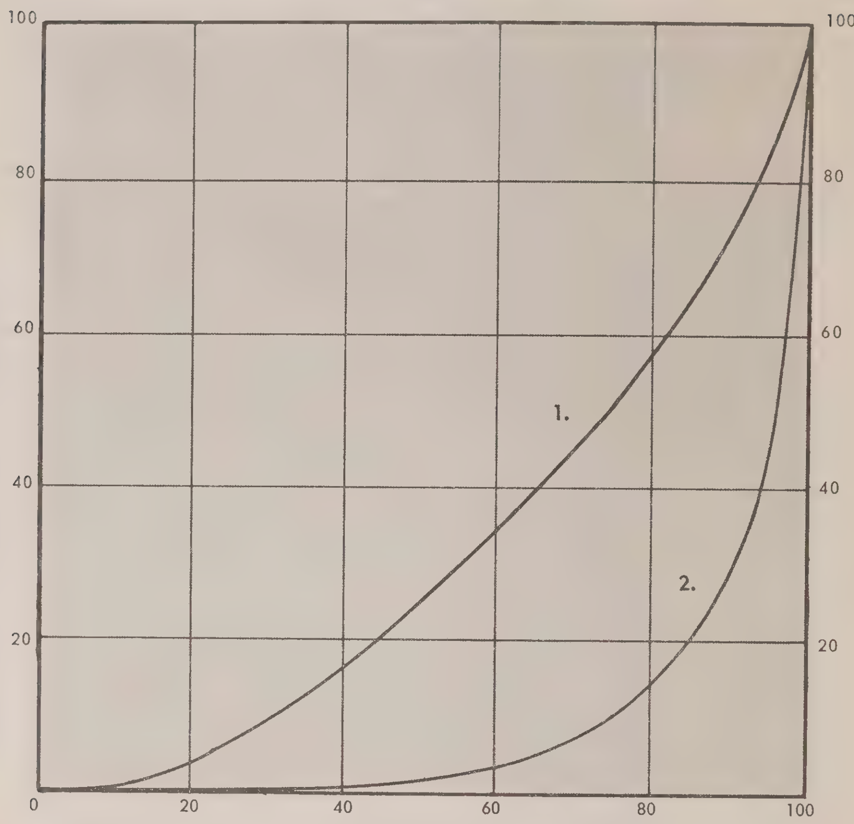
COMPARISON OF INCOME DISTRIBUTION OF SPENDING UNITS WITH INCOME DISTRIBUTION OF LIQUID ASSETS (EACH CUMULATED FROM LOW INCOMES), IN CANADA AND THE UNITED STATES, EARLY 1956



Source: Table 5.11

Chart 5.3

LORENZ CURVES RELATING TO INCOME AND TO LIQUID ASSETS, CANADA, EARLY 1956

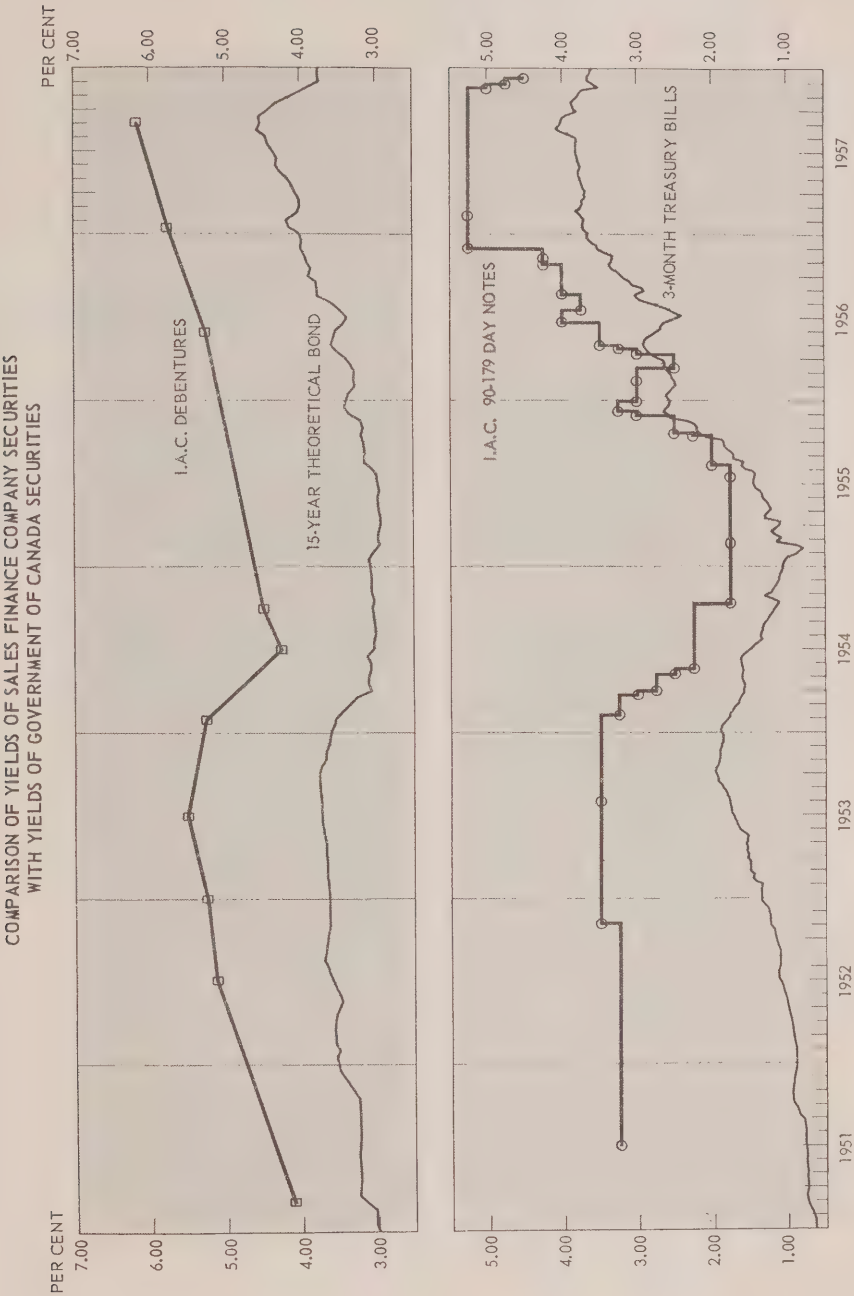


1. Comparison of distribution of spending units and distribution of income each by income size classes and each cumulated from low incomes.
2. Comparison of distribution of spending units and distribution of liquid assets each by liquid asset size classes and each cumulated from low levels of liquid asset holdings.

Sources: Curve 1. *Incomes, Liquid Assets and Indebtedness of Non-Farm Families in Canada, 1955*, D.B.S. Reference Paper, No. 80, Table 1.

Curve 2. Unpublished information relating to incomes, liquid assets and indebtedness of non-farm families in Canada, 1955, kindly supplied by DBS.

Chart 5.4


COMPARISON OF YIELDS OF SALES FINANCE COMPANY SECURITIES
WITH YIELDS OF GOVERNMENT OF CANADA SECURITIES
PER CENT
7.00
6.00
5.00
4.00
3.00
I.A.C. DEBENTURES
15-YEAR THEORETICAL BOND
I.A.C. 90-179 DAY NOTES
3-MONTH TREASURY BILLS
2.00
1.00
1951
1952
1953
1954
1955
1956
1957

6

BUSINESS FINANCE*

A. Introduction

In this chapter we shall be concerned with some aspects of the financing of business. We cannot hope to exhaust so far-reaching and complicated a subject in a single chapter; our aim is much more modest. As in most other chapters of this volume we shall first review selected facts and then against this background we shall concentrate on the regulators of the flows of funds.

The subject of business finance is complicated and extensive. It is so in considerable degree because of the diversity in the forms of business. On the one extreme we have the business of private home owning; at the other there are great public enterprises such as railways, other utilities and even public manufacturing concerns. In between we have the farmers, the mining and forestry concerns, the great and small manufacturing establishments and the private businesses that provide services to the nation including indeed the financial businesses. While we shall offer a few aggregate statistics that cover business defined in this all-inclusive way, we shall not discuss the business of home owning or the financing of government enterprises. The provision of funds to financial institutions will be taken up in subsequent chapters. Our main concern here will be with private non-financial corporate enterprises; the financing of unincorporated business, including agriculture, will also be considered, though in less detail.

While in Chapter 5 on "Consumer Finance" we were concerned both with the provision of finance to consumers and the provision of finance by consumers, in this chapter we shall be almost wholly concerned with the supplying of finance to business and the demand for finance by business. As we saw in Chapter 4, the business sector is the largest net demander of funds in the economy, notwithstanding the very great importance of business saving in financing many forms of business enterprise and notwithstanding the fact that some business concerns supply funds to other businesses.

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* Charts referred to in this chapter appear on pp. 298-300.

B. A Factual Review

1. Saving and investment by business

Let us first remind ourselves of the orders of magnitude of the figures relating to saving and investment by all business enterprises in the post-war period. This data has been presented in scattered places throughout Chapter 4; it also appears in the National Transactions Accounts set forth in detail below. In Table 6.1 we collate and summarize the information.

The data in Table 6.1 refer to all non-financial business in the years 1946 to 1954. The figures that are available for 1955 and 1956 include financial business as well, though of course the balance of saving less investment in this sector of the economy is trivial, made up as it is of financial intermediaries. For all years the business of home owning is included with unincorporated business.

As we have noted in Chapter 4, the business sector has been a deficit sector in each year of the post-war period in the sense that saving in that sector, though substantial, has been less than the amounts spent in that sector currently on inventory accumulation and fixed capital formation.

It is emphasized at many points in this volume that "deficits" of the sectors are defined by the accounting conventions employed. It is especially important to remember this in connection with the unincorporated business and government enterprises sectors. By convention no net saving is shown for the unincorporated business sector, it being accounted as an increase in consumers' equity in this form of business. Expenditures on new housing are included in the accounts of the unincorporated business sector, as are changes in liabilities for housing mortgages; but investment in mortgages by consumers is recorded as such in the consumer sector. With these conventions, the deficit for unincorporated business shows as rarely smaller than that for non-financial corporations in the post-war years and sometimes as very much larger. Indeed, even if we reduce the deficit of this sector by the amount of the increase in consumers' equity, it still remains greater than the deficit of non-financial corporations in several years. Similarly with government enterprises, net saving is accounted in the increase in equity of governments in the enterprises. In 1949, 1952, 1953 and 1954, the "deficit" of government enterprises exceeds that of non-financial corporations even if we reduce the deficit of the enterprises by the increase in government equity in them. Over the years 1946 to 1954 inclusive, the deficits or net demands for funds by unincorporated business were $7.1 billion, by non-financial corporations $3.1 billion and by government enterprises $2.8 billion. Over all the post-war years 1946 to 1956, the net combined demands by each of these three business sectors were $18.0 billion. This is the amount by which saving of $28.7 billion was less than investment of $46.7 billion.

Table 6.1

SAVING AND INVESTMENT BY BUSINESS[a] 1946-56

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956[c]
Saving	1,272	1,218	1,412	1,883	2,258	1,963	3,521	3,563	3,453	3,861	4,311
Investment[b]	1,698	2,476	2,674	3,019	3,856	4,829	4,920	5,527	4,596	5,491	7,589
Saving-Investment	—426	—1,258	—1,262	—1,136	—1,598	—2,866	—1,399	—1,964	—1,143	—1,630	—3,278
Unincorporated business	—282	—457	—548	—690	—1,008	—1,077	—1,073	—1,177	—828	n.a.	n.a.
Non-financial corporations	—203	—721	—359	— 75	—385	—1,426	131	—165	68	n.a.	n.a.
Government enterprises	59	— 80	—355	—371	—205	—363	—457	—622	—383	n.a.	n.a.

a 1955 and 1956 include financial business; other years include only non-financial business.

b 1955 and 1956 include investment in inventories by government.

c Figures for 1956 are taken from *National Accounts: Income and Expenditure, 1956 and 1957 (Revised), a statistical supplement to National Accounts: Income and Expenditure, 1926 to 1956.* (D.B.S. no date) These figures do not agree with 1956 figures presented in Part VI below.

SOURCE: Part VI below.

In considering the net demands of the business sector on other sectors of the economy, sight should not be lost of the very considerable magnitude of saving in the business sector. Business saving in the years 1946 to 1956 averaged over 55 percent of total saving (defined to include offsets to government gross capital formation); personal saving was 21 percent of total saving on the average over this period.

Let us now consider in more detail the financing of different types of business enterprise. We shall pay especial attention to the financing of privately-owned (non-financial) corporations to which we now turn.

2. *The financing of privately-owned non-financial corporations*

In considering the financing of corporations the first point to be recognized is the very considerable importance of the saving done by the corporations themselves. This saving in the post-war years was very much larger — over three and one-half times larger than the net demands made by corporations on other sectors of the economy.

Two of the main components of corporate saving are capital consumption allowances and undistributed profits. At the beginning of the post-war period the capital consumption allowances were rather lower than undistributed profits for private corporations but over the period they grew very much more rapidly than undistributed profits. Average figures for the years 1946 to 1948 and 1952 to 1954 are shown in Table 6.2.

Table 6.2

CAPITAL CONSUMPTION ALLOWANCES AND UNDISTRIBUTED PROFITS OF PRIVATELY-OWNED CORPORATIONS

	Average for 1946-48	Average for 1952-54
1. Capital consumption allowances etc.[a] ($ million)....	569	1,358
2. Undistributed profits[b] ($ million)...............	635	639
3. Ratio of 1 to 2..............................	0.9	2.1

a Category B 1 (a) of National Transactions Accounts as presented in Part VI below for Sectors III, V, VI and VII.

b Item 49 (a) on p. 49 of *National Accounts: Income and Expenditure, 1926 to 1956*, published by Dominion Bureau of Statistics, Ottawa.

Corporations saved very large sums in the post-war period, and they supplied funds to other sectors; but they also withdrew funds from other sectors. Indeed, as we have pointed out they were net demanders of funds from other sectors in all but two of the nine post-war years. In Table 6.3 the amounts of the changes in many categories of financial assets and liabilities are shown for each of the years 1946 to 1954. Let us review this information briefly. Before doing so however, we must once again remind the reader that while we feel we have done the best that can be done in marshalling existing information on the transactions of the corporate

sector we are not satisfied with existing basic information. Several of the important estimates are residual estimates; information underlying other estimates is incomplete, and for some categories we could not produce estimates that warranted separate display. The accounts in Table 6.3 are an abbreviated version of a fuller statement in Part VI. The reader is invited to consult this fuller statement and the explanations of the accounts given in Part VI.

Among the asset items the largest figure shown in many of the years is that labelled "other transactions and errors (net)". We shall not go into this set of summary figures here. It includes what is known of transactions in existing real assets, receivables and payables and certain unclassified transactions as well as the residual in the corporate financial account, which in some years is large. Over the years 1946 to 1954 currency and deposits were built up by this sector by some $720 million and in only one year, 1951, a year of especially heavy corporate demands on other sectors for funds, was there actually a drawing down of deposits. Charge accounts and instalment credit outstanding on the books of retail corporate business increased in every year save the year of credit restrictions—1951—the total increase over the first nine post-war years amounting to some $360 million. Mortgages are not an important asset of non-financial corporations, but certain kinds of non-federal bonds are at times. In the first two post-war years corporations reduced their holdings of these bonds; for the next two years there was virtually no change in their holdings. In 1950 they reduced their holdings again but in each of the remaining years in our record they increased their holdings. The net increase over all post-war years was some $400 million. With respect to corporate holdings of Government of Canada bonds the story is different; in every year but 1950, non-financial corporations were net sellers of Government of Canada bonds, net sales over the first nine post-war years being of the order of $675 million. Sales were heaviest in the first three post-war years and in 1951 and 1952.

Corporations borrowed very considerable amounts during the post-war years; loans increased by $1,380 million, mortgage loans by $700 million and bonds outstanding by over $2,130 million. There was a substantial variation from year to year in the amounts borrowed in each of these categories; in some years the changes were reinforcing and in other years offsetting. In the period 1946 to 1954, the year of highest borrowing by corporations through bonds, mortgages and loans was 1953, when just over $700 million was the amount of these net borrowings.

Stock issues were also an important source of funds; our figures show the net increase in liabilities for stock outstanding at just over $1 billion for the first nine post-war years. Stock issues were not as large as borrowings as sources of funds in these years however; borrowings through bonds, mortgages, bank and other loans totalled about $4.2 billion.

A major category of transactions on which we have some information is the category "claims on associated enterprises". In our full tables we have shown figures for both debits and credits in this category for the non-financial corporations; in the abbreviated table (Table 6.3) we have shown the net liability. This net liability represents almost wholly[1] direct investment by foreign institutions and companies in Canadian non-financial corporations.[2] It is a sizable item, totalling almost $1.6 billion over the first nine post-war years, with nearly $1.4 billion concentrated in the years 1950 to 1954 inclusive.

It would be helpful if we could indicate what sectors of the economy are the main suppliers of funds to non-financial corporations. Unfortunately our statistics will not permit a detailed treatment of this question. For example, while we know that corporations made net sales of Canadian government bonds in the amount of $675 million in the period 1946-54 we do not know precisely to whom the bonds were sold; we only know which sectors of the economy were net takers of government bonds. We do know that the banks supplied funds in this period amounting to just over $1,300 million, and we do know that foreigners through direct investment supplied funds amounting to almost $1,600 million. The net issue of stock by Canadian corporations amounted to a little over $1 billion. We know that foreigners acquired Canadian stocks in the amount of $366 million but we do not have in the National Transactions Accounts the proportion of this that represents acquisitions of new issues as compared with acquisition of outstanding issues from others. There is reason to suppose that something of the order of 80 percent of the stock issued by Canadian corporations which was taken up domestically was taken up by persons and other groups apart from financial intermediaries.[3] The net issue of bonds amounted to $2.1 billion. We know that foreigners absorbed about $170 million of Canadian corporate bonds (apart from securities of finance companies) but again the National Transactions Accounts do not include the proportion of this represented by net new issues. Financial intermediaries in Canada undoubtedly acquired something of the order of two-thirds of those which were absorbed domestically and 40 percent to 50 percent of the total issue.[4] The increase in mortgages of corporations

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1 The exception is that triflingly small amounts of investment by government enterprises in non-financial corporations are included.

2 Some readers will be interested in the following technical observation. The whole of the net balance of direct investment by foreigners in Canada over direct investment by Canadian institutions and companies abroad (as these items are reported in the balance of payments for Canada prepared by the Dominion Bureau of Statistics) is not accounted for in this net liability "claims on associated enterprises". In addition some international direct investment representing investment in financial institutions such as banks and insurance companies is included. For further detail the reader may consult the full account for category C. 4 (b): Claims on associated enterprises shown in Part VI below and the textual description of the estimates given there.

3 It has been estimated that in the United States, financial intermediaries held 19.6 percent, 22.2 percent and 20.5 percent at the end of 1945, 1949 and 1952 respectively, of domestic corporate stock outstanding. See Raymond W. Goldsmith, *Financial Intermediaries in the American Economy since 1900*, National Bureau of Economic Research, (Princeton 1958), Table 55, p. 225.

4 Goldsmith (*Ibid.*, Table 54, p. 224) estimates that in the United States, financial intermediaries held 73.0 percent, 89.5 percent and 93.6 percent at the end of 1945, 1949 and 1952 respectively, of corporate bonds outstanding.

Table 6.3

NON-FINANCIAL CORPORATIONS
INVESTMENT, FINANCIAL AND OTHER TRANSACTIONS
ABBREVIATED ACCOUNT

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	Total
Debits — Asset items										
Currency and deposits	60	33	116	83	132	—106	138	83	182	720
Charge accounts and instalment credit	24	72	37	34	37	— 35	104	49	41	363
Mortgages	— 4	— 1	— 1	—	2	3	4	2	8	13
Government of Canada bonds	—232	—148	—106	— 5	137	— 90	—187	— 12	— 33	—675
Other bonds	—118	— 81	—	1	— 37	69	180	222	164	400
Other transactions and errors (net)	253	— 35	— 43	167	303	—225	958	748	735	2,860
Credits — Liability items										
Saving minus investment	—203	—721	—359	— 75	—385	—1,426	131	—165	68	—3,134
Loans	75	252	67	—	226	237	120	360	42	1,380
Claims on associated enterprises (net)	7	54	74	86	231	262	245	336	300	1,596
Mortgages	18	70	39	58	65	101	82	82	186	701
Bonds	16	198	134	167	292	261	391	268	400	2,128
Stocks	69	— 13	48	44	144	181	227	211	99	1,010

SOURCE: Part VI.

amounting to some $700 million was probably absorbed by financial institutions almost entirely.

These figures are highly aggregative; they refer to *all* non-financial corporations apart from government enterprises. It is of interest to us to know something of differences among such corporations in respect to their financial assets and liabilities. In particular we should like to report on broad differences at least, among companies in different industries and among companies of different size (as measured, for example, by total assets). The National Transactions Accounts data have not been developed for sub-groupings of non-financial corporations based on the industry within which companies operate or on the size of the company. We must therefore turn to another source for such information. The only other comprehensive source of complete balance sheets which it is feasible for us to draw upon is the series of publications entitled *Taxation Statistics* published annually by the Department of National Revenue. Here, standardized balance sheets for industrial groupings and size groupings of companies are shown. Not all companies are represented and there are many difficulties involved in interpreting the data. But in the next few pages we shall present and discuss information from this source.[5]

Companies classed as manufacturing companies comprise about one-quarter of the non-financial corporations and they own nearly one-half of the assets of these corporations. The distribution of the number and assets of non-financial corporations, based on taxation statistics for 1953, are shown in Table 6.4. There are a great many small manufacturing concerns, consequently the average figure of assets per company is not as high for manufacturing as it is for public utilities, mining, quarrying and oil well companies, or concerns in the field of transportation, storage and communication. It is higher however than for corporations in wholesale trade, retail trade, construction or service industries.

Let us now consider differences among industries in respect of their financial assets and liabilities. Table 6.5 will be helpful in this regard. (In the upper part of this table the industries are arranged from left to right in order of increasing size of assets per company. Definitions of terms are given in the notes to the table.)

[5] The companies on which we shall report are the companies designated as "fully tabulated companies" in the publication *Taxation Statistics, 1955,* (issued by the Department of National Revenue and published by the Queen's Printer). The data refer to the 1953 tax year. The fully tabulated companies number 48,350. Excluded are banks and insurance companies, co-operatives, crown corporations, personal corporations, mining companies that are exempt from income tax, and certain other companies. The total number of companies, fully tabulated and otherwise, is given as 65,438 (page 82). In the industrial breakdown of statistics we shall include only those fully tabulated companies that are non-financial corporations as the term is used in the National Transactions Accounts. The number of these non-financial corporations whose 1953 tax returns were fully tabulated is 46,786. Omitted are "trust and mortgage companies", "investment and holding companies", "non-resident owned investment corporations" and "loan companies and other finance companies".

Table 6.4

INDUSTRIAL DISTRIBUTION OF NUMBER AND ASSETS OF NON-FINANCIAL CORPORATIONS, TAXATION YEAR 1953

Industries	Number of companies (percent)	Total assets of companies (percent)	Average size of assets of companies ($ thousand)
Fishing	.1	—	135
Service	10.2	2.4	186
Agriculture	1.0	.3	195
Retail trade	19.2	6.3	253
Construction	7.4	3.0	317
Miscellaneous	9.0	3.8	323
Forestry	1.1	.5	356
Wholesale trade	16.5	7.8	369
Manufacturing	26.5	46.7	1,364
Transportation, storage and communications	5.2	14.0	2,068
Mining, quarrying and oil wells	3.4	10.7	2,446
Public utilities	.4	4.5	8,742
Total percent	100.0	100.0	—
Total companies	46,786	—	—
Total assets ($ billion)	—	36.25	—
Average assets ($ thousand)	—	—	775

SOURCE: *Taxation Statistics, 1955*, Section III, Table 7.

The companies in wholesale and retail trade have higher than average proportions of their assets in receivables, and higher than average proportions of their liabilities in bank loans and payables. Their ratios of funded debt to capital stock are lower than average, but their ratios of funded debt plus bank loans to total equity are about average, as are their ratios of the sum of depreciation allowances and net surplus to total equity.

The construction industry has a very large ratio of receivables to total assets, 28 percent, and its ratio of bank loans and payables to total liabilities is also, at 30 percent higher than average. It resembles the companies in trade further in having a rather low ratio of funded debt to capital stock and an approximately average ratio of funded debt plus bank loans to total equity. It contrasts with trade however, in that its ratio of depreciation reserves and net surplus to total equity is substantially in excess of that for all companies.

The service industry figures are on the whole a reflection of the average for all non-financial corporations with respect to their financial assets and liabilities.

Public utilities, and companies engaged in transportation, storage and communication, with their comparatively high investments in building and equipment, have relatively low ratios of financial assets to total assets and

Table 6.5

PERCENTAGE DISTRIBUTIONS OF ASSETS AND LIABILITIES OF NON-FINANCIAL CORPORATIONS BY INDUSTRIES TAXATION YEAR 1953

(including ratios among selected liabilities)

Balance sheet items	Fishing	Service	Agriculture	Retail trade	Construction	Miscellaneous	Forestry	Wholesale trade	Manufacturing	Transportation, storage and communication	Mining, quarrying and oil wells	Public utilities	Total
Assets													
Cash and deposits	9.2	5.8	3.3	4.6	7.5	4.5	4.2	4.5	3.6	3.1	4.7	1.6	3.9
Government securities	.8	1.7	2.7	1.1	1.7	2.4	.6	.9	2.1	2.2	3.0	1.8	2.0
Other securities	4.2	3.6	12.3	2.4	2.6	13.1	1.4	3.3	1.9	1.3	5.1	.5	2.7
Receivables	8.4	8.0	5.2	19.5	28.2	9.9	8.1	27.0	10.0	3.8	3.3	2.0	10.5
Inventories	10.3	2.7	14.8	31.8	22.7	.6	16.4	31.0	21.7	4.9	6.1	1.4	16.9
Land	.9	5.4	18.0	3.4	1.6	13.1	22.8	2.1	3.5	2.7	19.3	9.6	5 7
Buildings and equipment	59.9	55.2	37.5	25.7	29.3	48.1	39.5	17.5	47.8	70.7	33.4	67.5	46.1
Investment in subsidiaries	2.7	10.8	3.2	7.8	3.1	4.6	4.5	11.0	7.0	9.6	13.2	12.6	8.5
Other assets	3.6	6.8	3.0	3.7	3.3	3.7	2.5	2.7	2.4	1.7	11.9	3.0	3.7
Liabilities													
Bank loans	18.2	3.7	8.4	10.3	9.6	7.3	3.8	11.6	4.2	3.1	1.3	.3	4.8
Payables	10.3	8.6	6.3	15.7	20.0	12.5	8.5	17.0	7.9	4.8	4.1	1.8	8.6
Tax liabilities	.3	1.8	1.0	2.3	2.9	.9	1.2	2.2	2.8	.9	1.2	.9	2.1
Other liabilities	10.6	12.4	16.2	11.9	21.5	12.1	19.8	15.6	7.7	4.7	8.8	3.7	8.9
Funded debt	10.6	12.1	7.3	4.6	3.3	23.3	4.6	4.5	8.5	22.4	9.6	35.7	11.7
Liability deserves	—	.3	.2	1.4	.1	.1	.1	.1	.5	.4	.4	.1	.4
Depreciation and depletion reserves	21.1	21.6	14.4	10.3	15.3	15.0	29.4	7.3	25.0	24.5	18.8	21.9	21.1
Capital stock	27.6	22.2	33.8	19.7	9.7	20.5	12.9	20.1	17.6	25.4	38.9	28.9	21.8
Net surplus	1.3	17.3	12.4	23.8	17.6	8.3	19.7	21.6	25.8	13.8	16.9	6.7	20.6
Ratios													
Funded debt to capital stock	.50	.55	.23	.23	.34	1.13	.40	.22	.48	.88	.25	1.23	.55
Funded debt plus bank loans to total equity	.58	.26	.26	.28	.30	.70	.14	.33	.19	.40	.15	.62	.28
Depreciation and depletion deserves plus net surplus to total equity	.45	.64	.44	.64	.77	.53	.80	.59	.74	.60	.48	.50	.64

SOURCE: *Taxation Statistics, 1955*, Section III, Table 7.

Notes to Table 6.5

"Government securities" includes only bonds issued or guaranteed by the Government of Canada.

"Other securities" embraces "all stocks, bonds, mortgages, notes, agreements for sale and all types of negotiable securities other than those issued or guaranteed by the Government of Canada.

"Receivables" includes accounts and bills receivable after deduction of reserve for bad debts but does not include loans to officers, shareholders or employees.

"Funded debt" refers to bonds, debentures, notes, mortgages or other contractual obligations having a term to maturity exceeding one year.

"Net surplus" refers to "surplus minus deficit" where "surplus" includes all classes of surplus accounts plus reserve accounts designated as "general reserve", "contingency reserve", "bond redemption reserve", or "inventory reserve", and "deficit includes both operating and capital deficits".

"Total equity" is here defined to mean depreciation and depletion reserves plus net surplus plus capital stock outstanding.

of bank loans and payables to total liabilities. Rather, they show comparatively high ratios of funded debt to capital stock and to total equity. Their ratios of depreciation allowances and surplus to total equity are however slightly below the average for all corporations.

Companies engaged in mining, quarrying and in developing and producing oil have rather lower ratios of receivables or payables to total assets than companies in general. The particular characteristic of these companies is their very high ratio of capital stock to total liabilities. At 39 percent the ratio is almost twice as high as for all companies. This fact is reflected in the lower than average ratios of funded debt to capital stock, of funded debt and bank loans to total equity and of depreciation reserves and surplus to total equity.

The manufacturing industry, which embraces more companies and more assets than any other one industry (according to the present classification) is about average with respect to the proportions of its assets or liabilities, accounted for by financial assets and current financial liabilities. The ratios of funded debt and of capital stock to total liabilities are smaller than for all companies considered together, and the ratios of depreciation reserves and of net surplus are higher. Funded debt bears a smaller ratio to capital stock than for all corporations, and funded debt plus bank loans are also a smaller proportion of total equity. But depreciation reserves and net surplus are a higher proportion of total equity than among non-financial corporations generally.

There are a great many factors that combine to create differences among industries in the manner in which they will seek to finance their operations and in the manner in which outsiders will undertake to supply funds to them. In some industries, large agglomerations of durable real capital are

required. Generally speaking, in such industries, funded debt tends to be a relatively important liability, and accumulations of funds through depreciation reserves tend to be high. This is true of the public utilities and transportation industries for example. By contrast, in other industries such as trade, real durable capital is a much less and inventories a much more significant asset; this fact is reflected in the greater importance of bank loans and the lesser importance of depreciation reserves among the liabilities and the greater importance of both receivables and payables in the balance sheet. The regularity of income and other aspects of the security of investment in the industry affect the relative degree to which investors will prefer to invest in the bonds as compared with the stocks of the industry. The mining industry has, accordingly, a very low ratio of funded debt to stocks, while the utilities have a very high ratio. We have had to be content here with very broad contrasts among the industries; we cannot yield to the temptation to consider in detail the factors that make for differences in the financial patterns among the companies in different industries.

There is however one important factor affecting the financing of companies that we have not yet mentioned specifically. This is the factor of size. In Table 6.6 the distributions of companies and of total assets of companies by asset size groups are shown. It will be seen that nearly three-quarters of the companies have assets of less than one-quarter of $1 million but these companies account for only some 7 percent of the assets. By contrast, one-half of 1 percent of the companies have assets of $25 million or over, and these companies control about one-half of the

Table 6.6

DISTRIBUTION BY ASSET SIZE OF NUMBER AND ASSETS OF "FULLY TABULATED COMPANIES"

Taxation year 1953

Asset size group ($ thousand)	Number of companies (percent)	Total assets (percent)
Below $ 50	29.6	.9
$ 50- 100	20.4	1.7
100- 250	23.9	4.4
250- 500	11.1	4.5
500- 1,000	6.8	5.5
1,000- 5,000	6.2	15.5
5,000- 10,000	.9	7.0
10,000- 25,000	.6	11.4
25,000-100,000	.4	21.9
Over 100,000	.1	27.2
Total number of companies	48,350	—
Total assets ($ billion)	—	41.4

SOURCE: *Taxation Statistics, 1955*, Section III, Table 8.

assets. At least this is the situation with respect to the "fully tabulated companies" in the taxation year 1953.

Information for 1953 on balance sheets by size of company is presented in Table 6.7 in the form of percentage distributions of balance sheet items. The main pattern in these figures may be summarized as follows. Cash, receivables and inventories decline as a percentage of assets with increasing size of assets as do payables on the whole. Investments in subsidiaries are relatively more important among larger companies than among smaller ones. Investment in buildings and equipment runs around one-third or a little more of total assets for companies with assets up to $25 million but becomes significantly larger for companies with assets over $25 million, and for the few very large companies with assets over $100 million amounts to more than one-half of all assets. Bank loans increase in relative importance with increasing size of company among companies with assets under one-half a million dollars, but decline with increasing size among larger companies. Funded debt becomes a progressively larger proportion of total liabilities as one considers successively larger companies. By and large the opposite is true of capital stock. Surplus as a proportion of total liabilities increases with size among companies with assets of $5 million or less, but not among companies with assets larger than this.[6]

3. *The financing of small business*

a. Introduction

Unincorporated enterprise embraces a vast array of undertakings. Organized as proprietorships, partnerships, or co-operatives, these undertakings are found in many industries. They dominate in the field of agriculture. In retail trade 55 percent of the sales are attributable to the 89 percent of the stores that are owned by unincorporated concerns.[7] Among "wholesalers proper" about 19 percent of the sales are attributable to the 51 percent of establishments belonging to unincorporated businesses.[8] In manufacturing in 1951, some 63 percent of the establishments were operated by unincorporated businesses and they employed 11 percent of the workers in manufacturing.[9] A great many personal and business services, both professional and otherwise are supplied by unincorporated concerns.

6 In 1953 the ratio was 26.1 percent among companies with assets of $10 million to $25 million. Comparable figures for surplus less deficit as a percentage of liabilities for larger companies for 1955 are compared with the figures for 1953 below:

Total assets (millions)	1953	1955
1 - 5	22.9	22.9
5 - 10	20.8	24.6
10 - 25	26.1	22.5
25 - 100	20 8	21.6
100 - and over	21.3	21.6

7 See Dominion Bureau of Statistics, *Ninth Census of Canada*, 1951, Vol. VII, Distribution: Retail Trade, p. 15-1.

8 See Dominion Bureau of Statistics, *Ninth Census of Canada*, 1951, Vol. VIII, Distribution: Wholesale Trade; Services, pp. 13-1 and 13-2. For definition of "wholesaler proper" see *ibid.*, p. A-3.

9 D.B.S., *Canada Year Book, 1955*, pp. 662 and 663.

Table 6.7

PERCENTAGE DISTRIBUTION OF BALANCE SHEET ITEMS OF 48,350 CORPORATIONS, BY AMOUNT OF TOTAL ASSETS CANADA 1953

Balance Sheet Items	Below $50,000	$50,000 to $100,000	$100,000 to $250,000	$250,000 to $500,000	$500,000 to $1,000,000	$1,000,000 to $5,000,000	$5,000,000 to $10,000,000	$10,000,000 to $25,000,000	$25,000,000 to $100,000,000	Over $100,000,000	Total
Assets											
Cash	9.2	6.6	5.6	5.1	5.3	4.8	4.1	3.8	2.9	2.6	3.8
Government securities	1.0	1.2	1.3	1.5	1.8	2.0	2.5	3.2	3.7	2.2	2.5
Other securities	2.6	3.3	4.1	5.7	6.3	8.4	8.9	9.6	7.8	2.8	6.4
Receivables	19.7	20.0	20.2	19.7	18.0	14.6	12.0	10.1	8.3	9.1	11.8
Inventories	19.7	21.1	21.0	19.8	18.9	17.3	16.7	15.8	14.9	9.0	14.8
Land	2.1	3.2	4.0	4.5	4.5	6.1	6.4	4.6	6.4	4.0	5.1
Buildings and equipment	33.1	34.9	35.2	34.8	34.1	34.1	36.8	35.6	38.6	52.4	40.5
Investment in subsidiaries	2.4	1.8	2.2	3.6	4.9	8.3	9.0	14.4	14.8	16.2	11.8
Other assets	10.2	7.9	6.4	5.3	5.4	4.4	3.6	2.9	2.6	1.7	3.3
Liabilities											
Bank loans	7.7	8.8	10.3	10.5	9.6	6.9	5.3	5.1	3.0	3.4	5.3
Payables	22.4	18.3	16.5	14.8	12.6	9.2	8.4	7.8	8.5	5.1	8.8
Tax liabilities	1.4	1.4	1.6	1.9	2.1	2.2	2.0	2.2	1.9	1.6	1.9
Other liabilities	17.6	13.3	11.6	10.3	9.7	10.2	9.7	10.1	12.3	3.8	9.0
Funded debt	3.3	5.8	6.2	7.0	6.9	7.0	8.6	10.7	13.6	19.9	12.4
Liability reserve	—	.1	.2	.1	.2	.2	.1	.3	.3	.8	.4
Depreciation reserve	10.6	12.2	13.0	14.4	15.1	16.6	19.4	18.4	18.1	22.6	18.5
Capital stock	36.5	28.2	23.8	22.9	22.8	24.8	25.7	19.3	21.5	21.5	22.5
Surplus	.5	11.9	16.8	18.1	21.0	22.9	20.8	26.1	20.8	21.3	21.2
otal assets or liabilities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: *Taxation Statistics, 1955*, Section III, Table 8.

This form or organization is common in the construction industry, in taxiing and trucking and in the sale of real estate and insurance.

According to figures for the United States reported by the Office of Business Economics of the United States Department of Commerce, which exclude firms in agriculture and enterprises providing professional services, nearly 90 percent of the firms are unincorporated. Almost one-half of these unincorporated firms are in retail trade and about one-fifth in the service industries. In all industries shown in the classification (see Table 6.8), most of the firms are unincorporated, the proportion being over 90 percent in contract construction, retail trade and the service industries.

It is of course especially difficult to generalize about so diversified a group of businesses. One is even inclined to doubt that the classification of concerns by legal form of ownership is particularly useful in the enquiry we have in hand. It is of some broad significance of course; proprietorships cannot issue shares while corporations may for example. But perhaps for our purposes, a more useful classification of enterprise would be according to the industry within which the enterprise operates and according to the "size" of the business. For example, there are great differences between the financial needs and resources of firms in agriculture on the one hand and firms engaged in manufacturing on the other hand. Similarly, new and small firms in any industry have somewhat different possibilities and problems of financing their activity than do larger and longer established firms.

Table 6.8

PERCENTAGE DISTRIBUTION OF FIRMS

(United States as at January 1947)

Industries	A By type of organization within industries			B By industry within types of organization		
	All firms	Corporate	Non-corporate	All firms	Corporate	Non-corporate
Mining and quarrying	100	23.4	76.6	.9	2.0	.8
Contract construction	100	6.3	93.7	7.3	4.1	7.7
Manufacturing	100	32.5	67.5	8.3	23.8	6.3
Transportation, communication and other public utilities	100	13.8	86.2	4.6	5.6	4.5
Wholesale trade	100	23.7	76.3	6.6	14.0	5.7
Retail trade	100	5.9	94.1	44.6	23.2	47.3
Finance insurance and real estate	100	23.4	76.1	8.8	18.2	7.6
Service industries	100	5.4	94.6	18.8	9.1	20.0
All above industries	100	11.3	88.7	100.0	100.0	100.0

SOURCE: Betty C. Churchill, "Business Population by Legal Form of Organization", *Survey of Current Business*, April 1955, Tables 2 and 4, pp. 18 and 19.

Unfortunately our detailed statistical material does not permit us to show transactions accounts for different industries and within different industries by different "sizes" of firms. We have already explained that our sources of material have permitted us only to split the group of private non-financial businesses into those incorporated and those not, and such information as we present in the transactions accounts for these sectors has many short-comings. We very much need to develop new sources of information on the financing of private enterprises in Canada.

In this section we shall not adhere rigidly to the distinction between incorporated and unincorporated enterprise. We shall discuss the sources of finance available to agricultural concerns while recognizing that there are some incorporated firms in agriculture. We shall also discuss the sources of finance available to small or new non-agricultural enterprises, again recognizing that not all new or small businesses are unincorporated (and that not all unincorporated businesses are new or small!). We shall also refer in this section to government institutions and legislation designed specifically to aid in the provision of credit to agriculture and to small business. Let us turn first to the financing of agricultural enterprise.

b. Agricultural business

One of the outstanding characteristics of the financing of agricultural enterprise is that a very large part of the financial resources employed is supplied by farmers themselves. Evidence for the United States suggests that the agricultural sector of the economy is now and has been since the 1930's a *net* supplier of funds to other sectors of the economy. This evidence is given in a recent study of capital in agriculture in the United States published by the National Bureau of Economic Research, and is summarized in Table 6.9. In the early decades of the century when new land was still being acquired in addition to other forms of physical capital, farmers had need of outside finance and were successful in drawing it from private institutions and individuals. The depression of the thirties,

Table 6.9

GROSS SAVING AS A PERCENT OF GROSS INVESTMENT IN THE AGRICULTURAL SECTOR OF THE UNITED STATES ECONOMY

(quinquennial averages)

1900-04	81	1925-29	93
1905-09	79	1930-34	180
1910-14	68	1935-39	120
1915-19	72	1940-44	229
1920-24	38	1945-49	116

SOURCE: Alvin S. Tostlebe, *Capital in Agriculture: Its Formation and Financing since 1870*, National Bureau of Economic Research, Princeton, 1957, Table 36. We have taken lines 11, 12 and 20 from this table to represent gross saving which is the term applied to this combination of items by the author. Gross investment we have taken as lines 1, 2, 3 and 4 less lines 13 and 14. Gross investment includes expenditures to "maintain increase or improve" buildings, machinery and motor vehicles, and also land.

led to extensive losses on investments in farm debt in both Canada and the United States, and there was much refinancing of farm indebtedness with the aid of government lending institutions. With the recovery, investment in physical assets again grew rapidly though gross saving remained in excess of gross investment. The war years witnessed a rather slower rate of growth of gross investment than of gross saving as farm incomes soared and the exigencies of war restrained capital formation. After the war, with savings somewhat lower, investment grew greatly, and while saving remained in excess of investment, the excess was much less than it had been in the war years.

In the years 1945 to 1949, according to the American data in the National Bureau volume we have referred to, the ratio of gross saving to gross investment was of the order of 116 percent, the ratio of gross saving to income (including depreciation allowances) produced in the agricultural sector was some 19 percent, while the ratio of gross investment to income was about 16.5 percent. By contrast, in the corporate sector of the economy in the years 1946 to 1949 the ratio of gross saving to gross investment was about 73 percent, gross saving and gross investment were respectively 13 percent and 19 percent of the income (including depreciation allowances) produced in the corporate sector.[10]

But though the agricultural sector as a whole may be able in some years to supply more funds to other sectors than it demands from other sectors, individual farm enterprises often find their current receipts inadequate to finance all expenditures on goods and services so that funds must be obtained from other sources. There has been a considerable amount of lending by farmers to farmers. We do not know how much, but certainly the older generation has always supplied substantial financing to the newer generation in agriculture. But in addition to this, important if marginal blocks of funds have been obtained by farm enterprises from lenders outside of the agricultural sector, either local banks and individuals or national institutions such as the life and mortgage companies and the federal government lending agencies.

In the United States, it appears that farm real estate mortgage debt which is now of the order of one-half of total farm debt is owed to individuals to a much lesser extent than was formerly the case. Banks are of approximately the same relative importance as holders of farm real estate mortgages as they were in 1910 and insurance companies are considerably more important. In the depression, the relative importance of all private lenders in this field diminished greatly while that of federal farm credit agencies became of supreme importance. Since the depression the relative importance of the private lenders has again increased some-

10 The figures for the corporate sector shown here are only roughly comparable to those for the agricultural sector. Net income of corporations was taken from the 1951 National Income Supplement to the *Survey of Current Business*, Table 12, (published by Office of Business Economics of the Department of Commerce). Depreciation allowances, gross saving and gross investment were taken from Table E 53 of the *President's Economic Report*, January 1957.

what. Figures for a selection of years are shown in Table 6.10. The data may be summarized in another way: there has been a secular decline in the role of the local creditor in providing real estate loans to farmers; the local creditor has been supplanted largely by the life insurance companies and the federal lending agencies.

Non-real estate farm debt (at $9.6 billion on January 1, 1957) in the United States now amounts to nearly as much as real estate mortgage debt. In 1940 for example when farm debt totalled about $10 billion, non-real estate debt constituted about one-third of the total. In 1950 real estate debt was $1 billion less than it had been in 1940 and non-real estate debt at double its 1940 figure accounted for about 55 percent of total farm debt. Since 1950 real estate debt has grown rather more rapidly than non-real estate debt. It is used for a variety of purposes; to finance current operations and living expenses, and purchases of livestock, machinery and durable goods.

Table 6.10

DISTRIBUTION OF FARM REAL ESTATE DEBT OUTSTANDING BY PRINCIPAL CLASSES OF LENDERS, JANUARY 1, SELECTED YEARS, UNITED STATES

Year	Federal agencies[a]	Life insurance companies	Banks[b]	Individuals and miscellaneous	Total	Total Outstanding (billions of dollars)
	(percent)					
1910......	—	12	13	75	100	3.2
1920......	3	12	14	71	100	8.4
1930......	12	22	10	55	100	9.6
1940......	42	15	8	35	100	6.6
1950......	21	21	16	42	100	5.6
1957......	20	25	13	42	100	9.9

a Includes Federal land banks, Federal Farm Mortgage Corporation, and Farmers Home Administration.

b For 1930 and before, includes open state and national banks; after 1930, includes insured commercial banks.

SOURCES: 1910 to 1940 inclusive: R. J. Saulnier, Harold G. Halcrow, and Neil H. Jacoby, *Federal Lending and Loan Insurance*, National Bureau of Economic Research, (Princeton, 1958), Table 23, pp. 159-61. 1950 and 1957: "The Balance Sheet of Agriculture, 1957", *Federal Reserve Bulletin*, August 1957, Table 7, p. 909.

Of the total of non-real estate debt, debts on price support and storage loans made or guaranteed by the Commodity Credit Corporation, make up just under one-fifth. Of the rest, banks supply a little over 40 percent; perhaps another 41 percent or 42 percent is supplied by individuals, merchants, dealers, finance companies and then private lenders (many of whom are in turn, of course, indebted to banks) and perhaps 15 percent or 16 percent is supplied by federally sponsored agencies.[11]

The information on the amounts supplied by sources other than banks and government agencies is scanty and the estimates accordingly less

[11] The principal source of information on this matter is the annual Balance Sheet of Agriculture issued by the Agricultural Research Service of the U.S. Department of Agriculture. This document is usually summarized in the *Federal Reserve Bulletin*, (see the issue for August 1957).

reliable. We may comment however on the role of such sources in financing agricultural equipment expenditures, as some special research has been done on this matter.[12] In brief it would appear that in the United States the manufacturers of equipment which, prior to the depression had been the principal and almost sole suppliers of credit, have now become distinctly marginal lenders to farmers though they have been less successful in shifting the wholesale financing of dealers' inventories to other lenders. Commercial banks play a very significant role in financing expenditures, on both new and used equipment. Retail dealers are next in importance in financing purchases of new equipment, while individuals rank next to banks as suppliers of credit to finance purchases of used equipment. This at least was the situation in 1947 according to a survey of some 12,000 farms conducted in that year by the Bureau of Agricultural Economics. The percentage distribution of the outstanding equipment credit by lenders derived from that survey is shown here as Table 6.11.

Table 6.11

PERCENTAGE DISTRIBUTION OF THE DOLLAR VOLUME OF FARM EQUIPMENT CREDIT, UNITED STATES, 1947, AMONG SOURCES OF CREDIT

Source of credit	New equipment	Used equipment
Commercial banks	48	52
Retail dealers	18	2
Individuals	9	24
Production Credit Association	10	7
Farmers Home Administration	4	6
Finance companies	4	5
Manufacturers	1	0
Other	6	4
Total	100	100

SOURCE: Howard G. Diesslin, *Agricultural Equipment Financing*, *op. cit.*, Table 13, p. 39.

To this point we have been reviewing broad statistics relating to the financing of agriculture in the United States. But of course agriculture is a collection of heterogeneous enterprises displaying bewildering variety in their financial resources and requirements. The large grain farmer requires different real assets and has different needs for financial accommodation than the large dairy farmer. In general the large farms have different needs and opportunities for borrowing than the smaller farms producing a mixture of crops or providing only part-time employment for the operator. We can recognize this relation of farm finance to the character of the farm but we cannot explore the matter in any detail here. The subject has been considered at some length in a recent publication of the National Bureau of Economic Research.[13] In this study it is demonstrated that

12 See the report by Howard G. Diesslin, *Agricultural Equipment Financing*, National Bureau of Economic Research, Occasional Paper No. 50, 1955.

13 Donald C. Horton, *Patterns of Farm Financial Structure*, National Bureau of Economic Research, (Princeton, 1957).

size of total assets is a very important characteristic differentiating farms in the extent to which finance from some source other than the operator is utilized. Generally speaking, large farms have greater recourse than smaller farms to borrowed funds or to contributions to equity from "landlords".

> "The relatively large farms given over primarily to the production of crops and livestock and on which land is ordinarily a major and buildings a minor component of assets, characteristically make relatively heavy use of external funds, usually drawing on landlords for equity and on such mortgage lenders as life companies for long term credit. Also, farms of this type ordinarily rely rather heavily on production credit which they tend to draw from local sources predominantly banks, and production credit associations."[14]

> "Contrasting sharply with the large-scale crop and livestock farms are the large farms in which dairy production predominates. The largest of the farms in this group are still not as large as the largest crop and livestock farms, however, and they make substantially less use of external funds especially of funds drawn from absentee sources. The equity in them is more likely to be provided by the operator than by a landlord, and there is a somewhat greater tendency to depend on local sources for such long-term credit as is used, rather than on lenders operating from some distance."[15]

The smaller farms, of course, present greater problems to the large absentee investor; the amount of funds required is smaller and the degree of supervision of the investment that is ordinarily required is greater.

In this very brief review of some of the facts covering the finance of agriculture in the United States we have seen that for the agricultural sector as a whole there has been an increasing tendency to generate saving, at least equal to the value of the investment undertaken. The growing average size of farm and the increasing mechanization of farms may well place limits on the further development of this tendency. But this over-all picture of the sector obscures the need of individual enterprises for financial accommodation. In providing this accommodation there has been a secular decline in the importance of the individual (who still nevertheless remains a very important source of credit to farmers) and a rise in the importance of government lending agencies. In the field of real estate credit the life insurance companies have increased their role in the last two decades and banks remain significant lenders. In the field of non-real estate credit, banks are not quite as important as they once were, having yielded place primarily to government agencies, but in the specialized field of farm equipment financing, which two decades ago was dominated by the manufacturers, they have become the most important lenders. The total

14 Donald C. Horton, *Patterns of Farms Financial Structure*, *op. cit.*, p. 11.

15 *Ibid.*, p. 12.

of farm credit, at almost $20 billion in the United States, is now probably somewhat greater than it was at the beginning of the nineteen twenties. At present it would appear that about one-half of outstanding farm debt is supplied by banks and federal or federally sponsored agencies with the total contribution of the banks[16] being roughly equal to that of the government agencies.

For Canada information is not readily available that would enable us to state with assurance what is the *net* position of the agricultural sector with respect to the flows of funds between it and other sectors of the economy. One might suppose however that, during the war, when mortgage debts were reduced and bank loans to farmers were somewhat lower than they had been in the late thirties and arrears of taxes were caught up that if the agricultural sector were not a net supplier of funds to other sectors it was by the same token not a net demander of large flows of funds. In the post-war years with the growth of farm mortgage debt and machinery debt it seems likely that as in the United States the sector has increased its drawings from other sectors rather more than its investments in other sectors.

In Canada as in the United States most farms are operated as unincorporated enterprises. Not all of the equity in the real assets employed on farms is held by farm operators and farm creditors however. A significant portion is held by landlords who rent land to operators. We do not know precisely what this may amount to, but the following calculation may give some indication. According to the 1951 Census, the value of land and buildings employed in agriculture was approximately $5.5 billion.[17] However, only about three-quarters of the area of occupied farms was operated by the owners of the land.[18] Inasmuch as there are no buildings on much of the rented land, and some of it is low-value pasture land its value per acre would be somewhat lower than that owned by operators. If the rented land had a value per acre 25 percent below the average for all occupied farm land then the value of rented land in 1951 would be estimated at approximately $1 billion. This is not necessarily the landlords' equity however, unless the rented land is unencumbered by debt. We shall not try to estimate the proportion of farm mortgage debt that is secured by rented land. (It may be noted that landlords may sometimes be farm operators, that is a man may operate land that he owns in one location and rent land he holds elsewhere to other operators. Similarly, it is conceivable

16 A detailed review of the farm lending activities of banks in the United States based on a sample of 1,500 banks and some 54,000 of their farm loans at June 30, 1956, is contained in the following articles in the *Federal Reserve Bulletin:*

"Farm Loans at Commercial Banks", November 1956, pp. 1163-78.
"Farm Loans to Finance Intermediate-Term Investments", January 1957, pp. 9-17.
"Farm Loans for Current Expenses", February 1957, pp. 125-32.
"Loans to Buy Farm Real Estate", February 1957, pp. 133-41.
"Interest Rates on Farm Loans", March 1957, pp. 259-68.

17 Dominion Bureau of Statistics, *Ninth Census of Canada*, 1951, Vol. VI, Part I, *Agriculture*, Table 1.

18 *Ibid.*

that some landlords may hold mortgages against land owned by other landlords.)

It has been suggested[19] that loans to farmers in mid-1951 may have amounted to approximately $1 billion, though we do not know the figure very precisely. The value of land, buildings, implements, machinery and livestock on Canadian farms was reported in the Census as $9.5 billion.[20] If to this we add a round half billion dollars, which is probably an underestimate, to cover inventories and other real assets we fix the value of real assets on farms at about $10 billion in 1951 and conclude that the equity of farm operators in these assets may have been of the order of 80 percent. We emphasize that these guesses are not intended to be regarded as other than very rough calculations.

Let us turn now to the sources of agricultural credit. It is convenient to consider separately the sources of mortgage credit, intermediate-term credit used to finance farm improvements and acquisitions of farm machinery, and short-term credit having less than one year to maturity.

In the 1951 Census of Agriculture, farm operators[21] were asked to report whether there was any debt in the form of a mortgage or agreement for sale on the farm property they owned and whether the debt was held by a) government (any level), b) corporations or private financial institutions or c) private individuals.[22] Of all operators, 28 percent reported having mortgages against farm property which they owned. Some 37 percent of those mortgages were said to be held by government lending agencies, 17 percent by corporations and financial institutions and the rest by individuals. It is clear from this that individuals are very important suppliers of mortgage money to the agricultural sector of the economy in Canada, just as they are in the United States, and perhaps they hold about the same proportion of the amount of this debt outstanding in Canada as they do in the United States. It is equally clear that financial institutions are not nearly so important as suppliers of mortgage money to agriculture in Canada as in the United States and accordingly the agencies of government are correspondingly more important. In Canada, banks were not allowed to hold mortgages as principal security against loans until 1944 when, under the Farm Improvement Loans Act, an exception to the general rule was made. In 1954, under the modifications of the National Housing Act then introduced, banks were permitted to make residential real estate loans of a kind prescribed in the Act against the security of mortgages. To all intents and purposes however banks have not been suppliers of mortgage credit to agriculture to finance land and buildings. The life insur-

19 W. M. Drummond and W. Mackenzie, *Progress and Prospects of Canadian Agriculture*, Royal Commission on Canada's Economic Prospects, (Ottawa, 1957) p. 128.

20 Dominion Bureau of Statistics, *Ninth Census of Canada,* Vol. VI, Part I, *Agriculture,* Table 1.

21 Or more precisely, a sample of 20 percent of them.

22 Thus no information on mortgages was collected from landlords who were not operators.

ance companies and trust and loan companies were rather large suppliers of mortgage credit especially in the Prairie Provinces before the disastrous conditions of the thirties induced the enactment of legislation and voluntary arrangements providing for moratoria and debt adjustments. The favourable conditions of the forties led to the liquidation of mortgage debts owed to financial institutions. Thus, between 1937 and 1947 mortgage debt owed by farmers on the Prairies to life, trust and loan companies belonging to the Dominion Mortgage and Investments Association fell from $182 million to $47 million.[23] In the post-war years there has been some resumption of lending by these institutions to Prairie farmers, especially in Manitoba and Alberta, but their outstanding loans to Prairie farmers stood at only $19 million at the end of 1956;[24] repayments thus greatly exceeded new loan extensions. At the end of 1951 the total outstanding amount of farm mortgages and agreements for sale held by life insurance, loan and trust companies has been estimated at $36.5 million; the corresponding figure estimated for the end of 1955 is $31.7 million.[25]

Credit unions are a source of mortgage credit to farmers, but we really do not know how important a source they may be. Estimates have been published of the total mortgage loans outstanding of credit unions as of unspecified dates in 1951, 1952 and 1953, the figures being $112 million, $130 million and $155 million respectively.[26] Rather more than half of the credit unions in 1951 were rural unions; this percentage has been declining since that date. On the average the rural unions are smaller than the urban. Perhaps as much as $20 million of credit union mortgages may have been held against farm property in 1951. By 1955 the figure conceivably could have been $30 million but we emphasize that we have no satisfactory basis for these guesses.

Among the government sources of mortgage money for farmers, the Veterans' Land Act Administration has in recent times been by far the most important. The Act was passed in 1942 and is designed to assist in the rehabilitation of veterans through settlement on full-time farms or part-time smallholdings. Under the original Act the Administration undertakes to advance up to 90 percent of the appraised value of the real estate up to a maximum appraised value of between $4,800 and $6,000, the maximum depending on whether the veteran chooses to accept a grant of up to $1,200 for the purchase of chattels. The veteran undertakes to pay the remaining 10 percent of the maximum appraised value of the real estate (and any excess of the purchase price over the maximum appraised value). If the veteran operates the farm for 10 years he is not required to repay any of the chattel grant and is required to pay only two-thirds

23 Dominion Mortgage and Investments Association, *Annual Report, Annual Meeting - May 5, 1955,* (mimeo.) p. 10.

24 Dominion Mortgage and Investments Association, *Annual Report, Annual Meeting - May 9, 1957,* (mimeo.) p. 8.

25 W. M. Drummond and W. Mackenzie, *Progress and Prospects of Canadian Agriculture,* Royal Commission on Canada's Economic Prospects, (Queen's Printer, 1957) p. 117.

26 Central Mortgage and Housing Corporation, *Mortgage Lending in Canada, 1954,* Table 29, p. 56.

of the advance against real estate, this debt being amortized from the date of its contraction at 3½ percent over 25 years. Under a 1954 amendment to the Act, provision is made for a loan of two-thirds of the value of additional land or improvements up to a maximum loan of $3,000 for a full-time farmer or $1,400 for a part-time farmer, this to be amortized at 5 percent over 25 years. Thus on the purchase of a new farm the amount available for advance under the Act is $8,400 against real estate alone or $8,520 against real estate and chattels.

Outstanding indebtedness under the Veterans' Land Act as at March 31st. in recent years is shown in Table 6.12.

Table 6.12

OUTSTANDING INDEBTEDNESS UNDER VETERANS' LAND ACT
AS AT MARCH 31, 1950 TO 1956

(millions of dollars)

1950	175.5	1954	220.0
1951	191.7	1955	229.7
1952	203.0	1956	235.2
1953	211.2		

SOURCE: W. M. Drummond and W. Mackenzie, *Progress and Prospects of Canadian Agriculture*, Royal Commission on Canada's Economic Prospects, (Queen's Printer, Ottawa, 1957), Table 56, p. 119.

The other principal federal government agency supplying mortgage credit to farmers is the Canadian Farm Loan Board established in 1929 under the Canadian Farm Loan Act of 1927. The latest revision in the Act was in 1956. The Board is empowered to make loans against the security of farm land (provided the land is equipped with necessary farm buildings so as to constitute a complete farm unit) for the following purposes: "to pay debts, to purchase livestock and farm implements, to make farm improvements, to erect new buildings, to repair buildings, to provide for expense of farm operation, to assist in the purchase of farm land, or any other farm purpose".[27] By the amendments of 1956 the Board's authorization to extend loans on the security of second mortgages was repealed, the maximum first mortgage loan was increased from $10,000 to $15,000, the maximum ratio of loan to appraised value of security was raised from 60 percent to 65 percent and the maximum loan term was increased from 25 to 30 years. The rates of interest that the Board has charged on first mortgages are as follows: 1929 to Oct. 12, 1934, 6½ percent; Oct. 13, 1934 to May 22, 1935, 5½ percent; May 23, 1935 to April 1, 1945, 5 percent; April 2, 1945 to March 31, 1952, 4½ percent; April 1, 1952 through 1957, 5 percent. The Board pays over profits on its transactions to the Receiver General of Canada and borrows as required from the Minister of Finance at current rates of interest. The loans outstanding for selected years and groups of years are shown in Table 6.13.

27 Quoted from the Annual Report of the Board for the year ended March 31, 1957.

Table 6.13

CANADIAN FARM LOAN BOARD — LOANS TO FARMERS OUTSTANDING AS AT MARCH 31st

(millions of dollars)

Averages					
1931-35	8.9	1951	28.5	1955	40.3
1936-40	30.0	1952	29.9	1956	45.1
1941-45	33.1	1953	31.6	1957	53.9
1946-50	24.0	1954	35.2		

The purposes for which loans were made in each of the three most recent fiscal years are set forth in Table 6.14.

The distributions of loans made and amounts disbursed in the fiscal year 1956 to 1957 and since the inception of the Board by economic areas is shown in Table 6.15. In the year 1956-57 the Board made disbursements on 2,826 first mortgage loans amounting to $13 million. Since inception the Board has made disbursements of $121 million on 60 thousand loans.

The average size of the mortgage loans approved by the Farm Loan Board is rather smaller than that of the loans approved by life, trust and loan companies, though in the last several years this size has been increasing. Data in support of this assertion are shown in Table 6.16.

The Canadian Farm Loan Board supplanted several provincial farm lending agencies; but in three provinces government lending agencies have been established since the inception of the federal Board. The first of these was the Quebec Farm Credit Bureau established in 1936. Prior to its establishment and until 1951 the Quebec government subsidized interest payments of Quebec farmers to the Canadian Farm Loan Board to the extent necessary to reduce the net cost of loans from the federal agency to 3 percent. The Quebec Farm Credit Bureau lends at 2½ percent in

Table 6.14

PURPOSES OF LOANS APPROVED YEAR ENDED MARCH 31st

	1955 %	1956 %	1957 %
To buy land and pay land-secured debt	52.5	49.6	58.5
To pay debts	28.0	30.1	21.6
To buy livestock and machinery and to make improvements	16.5	16.8	14.3
Sundry	3.0	3.5	5.6
	100.0	100.0	100.0

SOURCE: Annual Reports of the Canadian Farm Loan Board.

Table 6.15

DISTRIBUTIONS BY AREA OF LOANS MADE AND AMOUNTS DISBURSED

	First Mortgage Loans 1956-57		All Loans 1929 to March 31, 1957	
	No. of loans %	Amount disbursed %	No. of loans %	Amount disbursed %
British Columbia	3	4	4	6
Prairies	59	55	52	51
Ontario	24	29	14	18
Quebec	5	5	20	17
N.S., N.B., P.E.I.	9	7	9	8
	100	100	100	100

SOURCE: Annual Report of the Canadian Farm Loan Board for 1957.

amounts up to $7,000 that are repayable in 39½ years. Approximately one-half of the amount disbursed has been in loans to establish farmers' sons. The amounts of the Bureau's loans outstanding at year end from 1951 to 1955 are as follows:

1951	$81.6 million
1952	88.6 "
1953	97.4 "
1954	107.8 "
1955	120.3 "

It will be noted that these amounts are more than twice as large as the corresponding figures for the Canadian Farm Loan Board.

Ontario, in 1952, set up the Ontario Junior Farmer Establishment Loan Corporation, with the object of providing mortgage loans to young Ontario farmers between the ages of 21 and 35 years who have had a minimum of

Table 6.16

AVERAGE SIZE OF FARM LOANS

Year	Life, Trust and Loan Companies	Year	Canadian Farm Loan Board
1951	$5,169	1950-51	$2,629
1952	5,492	1951-52	2,949
1953	5,976	1952-53	3,473
1954	5,902	1953-54	3,738
1955	6,823	1954-55	3,835
		1955-56	4,040
		1956-57	4,785

SOURCE: W. M. Drummond and W. Mackenzie, *Progress and Prospects of Canadian Agriculture*, Royal Commission on Canada's Economic Prospects, (Queen's Printer, Ottawa, 1957), Table 55, p. 117 and Annual Reports of Canadian Farm Loan Board.

three years of experience in farming. Loans may be made in amounts up to 80 percent of the value of the property offered as security, the maximum loan being $15,000. The rate of interest charged currently is 4 percent and the maximum term is 25 years. As at the 31st. of March 1956 the amount of loans outstanding was $10.3 million.

In Nova Scotia, the Land Settlement Board, operating under the Nova Scotia Land Settlement Act, 1932, assists in the settlement of young or new farmers by offering loans up to $10,000 for an individual, $14,000 for two partners or $21,000 for three partners, (the partners being father and sons) with the maximum in any case equal to two-thirds of the appraised value of the farm. The loans are amortized for periods of 10 to 25 years. At the end of the war the interest rate was reduced to 3½ percent from 5 percent but has subsequently been raised to 5 percent again including the ½ percent charge for insurance against the death of the borrower. At March 31, 1951 $0.7 million was outstanding; by March 31, 1956 this figure had climbed to $1.7 million.[28]

Let us now summarize this review of the sources of mortgage loans to farmers. Apart from individuals, government lending agencies, especially the Veterans' Land Act Administration, are now the principal suppliers of mortgage loans to agriculture. The financial institutions are of rather minor importance. We do not know the amount of farm mortgage debt that is outstanding but if as reported in the 1951 Census with respect to operators' debts, individuals hold some 45 percent of the mortgages and if we suppose that the average size of the mortgages is the same as for all other lenders combined, we may make the rough calculation shown in Table 6.17 which serves to recapitulate the above review of amounts supplied by the various sources. Figures are also given for 1955 with individuals' loans assumed to be the same percentage of total loans as in 1951.[29]

Turning now to the sources of intermediate-term credit for farmers we find that in the last decade the banks, under the provisions of the Farm Improvement Loans Act of 1944, have been a very important source. It seems likely that the manufacturers of farm equipment have retired from the provision of credit to farmers much as they have in the United States,[30] but it is also likely that retail dealers, finance companies, credit unions and individuals (in connection with the transfer of used equipment) supply substantial amounts of intermediate-term credit. Unfortunately the only

28 The reader is referred to the Report of the Royal Commission on Rural Credit, Nova Scotia, published in 1957, for futher detail.

29 In figures for the United States shown in Table 6.10 above, the proportion of farm real estate debt held by "individuals and miscellaneous" is the same in 1957 as in 1950.

30 Referring particularly to the situation in Saskatchewan, the Royal Commission on Agriculture and Rural Life in that Province, in its *Report No. 3 — Agricultural Credit*, submitted in 1955, remarked as follows: "Although implement, oil and fuel companies have virtually ceased to sell on credit, local dealers and general merchants have not moved so far in the direction of an all-cash business in spite of the difficulties they experienced as a result of extensive credit sales in the 1930's", p. 32.

Table 6.17

ESTIMATED DISTRIBUTION OF FARM MORTGAGE DEBT IN CANADA
1951 AND 1955

Lender	1951		1955	
	$ million	%	$ million	%
Veterans' Land Act Administration (March 31st)	191.7	29	229.7	28
Quebec Farm Credit Bureau (Dec. 31st)	81.6		120.3	
Canadian Farm Loan Board (March 31st)	28.5		40.3	
Ontario Junior Farmer Establishment Loan Corporation (March 31st)	—		6.9	
Nova Scotia Land Settlement Board (March 31st)	0.7		1.5	
Total government	302.5	46	398.7	48
Insurance, trust and loan companies (Dec. 31st)	36.5		31.7	
Credit unions	20.0		30.0	
Total institutions	56.5	9	61.7	7
Total institutions and government	359.0	55	460.4	55
Individuals	291.0	45	374.6	45
Total	650.0	100	835.0	100

firm statistical information we have pertains to bank loans under the Act mentioned above and that information is given in Table 6.18.

Under the Farm Improvement Loans Act, farmers may borrow for a wide variety of farm purposes: to acquire machinery and livestock, to construct, alter and repair buildings, to provide electric systems, draining, fencing, plumbing, heating, irrigation facilities and to clear land. The proportions of the costs of such improvements which the farmer is required to furnish himself are set out in the table. Farm machinery loans are repayable in three years. The term of other loans varies from 18 months for loans of $400 up to a maximum of 10 years for a $5,000 loan. The maximum rate of interest is currently 5 percent simple interest. At present the maximum balance that any borrower may owe under the Act is $5,000.[31]

This Act is important in the history of the Canadian capital market not only because it provided an important source of credit for special needs of farmers but because it established two important principles. The first of these was that banks might for these limited purposes take a mortgage on real property as prime security for a loan. The second was that the government guaranteed each bank against losses up to a maximum of 10 percent of the aggregate principal amount of its loans subject to a maximum over-all guarantee.[32] Both of these principles were incorporated a decade later in 1954 in the housing legislation as it affected banks.

31 This maximum was $3,000 from 1944 to 1952; it was raised to $4,000 in 1953 and to $5,000 in 1956.

32 For three years following April 1, 1953 the aggregate of loans subject to the guarantee was set at $300,000,000. This figure was renewed in the review made in 1956.

Table 6.18

A

FARM IMPROVEMENT LOANS OUTSTANDING AS AT DECEMBER 31st

(millions of dollars)

1945	3.4	1951	102.7
1946	8.1	1952	122.7
1947	16.0	1953	138.1
1948	26.1	1954	130.4
1949	44.1	1955	133.2
1950	73.4	1956	129.7

B

CLASSIFICATION OF FARM IMPROVEMENT LOANS BY PURPOSE

	Proportion of total cost of project to be financed by farmer %	Total loans from Jan. 1, 1945 to Dec. 31, 1955	
		Number of loans (thousands)	Amount of loans ($ million)
Purchase of farm implements:			
New	33	465.4	519.5
Used	40		
Construction and repair of buildings	10	27.1	32.5
Purchases of livestock	25	23.3	19.0
Improvement of development project	25	15.3	9.2
Farm electric systems	25	3.4	2.1
Fencing or drainage	25	.7	.5
Total		535.2	582.7

C

DISTRIBUTION OF FARM IMPROVEMENT LOANS BY AREAS

	Total loans from Jan. 1, 1945 to Dec. 31, 1955	
	Number of loans (thousands)	Amount of loans ($ million)
Atlantic Provinces	18.5	17.4
Quebec	40.9	45.6
Ontario	75.3	81.7
Prairie Provinces	385.0	421.7
British Columbia	15.7	16.3
Total	535.2	582.7

SOURCE: Annual Report of the Farm Improvement Loans Act, 1955.

Short-term credit is provided to farmers by banks, merchants, individuals, credit unions, by the federal government (in the form of cash advances on farm-stored grain) and by municipalities (through tax arrears). Interest is ordinarily charged on all such credit except that provided by merchants, though even in this case if the merchant requires the farmer to sign a note covering his overdue accounts and then discounts this note at the bank, the farmer will be required to pay interest. We shall not attempt to estimate the total volume of short-term credit to farmers that is outstanding. Bank loans to farmers excluding farm improvement loans are shown in Table 6.19.

Table 6.19

OUTSTANDING BANK LOANS TO FARMERS
EXCLUDING FARM IMPROVEMENT LOANS

(millions of dollars as at December 31st)

1935-39 average	57.0 (as at Oct. 31st)
1951	175.2
1952	185.4
1953	195.4
1954	200.1
1955	232.9
1956	227.0

SOURCE: Farm Improvement Loans have been deducted from loans to "Farmers" shown periodically in the "Quarterly Classification of Loans" published in the *Statistical Summary* of the Bank of Canada.

c. Small non-agricultural business

Let us now review known and relevant facts relating to the financing of "small" non-agricultural businesses. The information on which to judge how, and how successfully, small businesses are financed is meagre and scattered. There are general characteristics of small businesses that limit the forms and sources of their financing and we shall consider these first.

The small business in any field depends very largely for its success on the initiative and drive of one or a very few individuals. While the competence of the management is always a factor to be considered in appraising any enterprise, this factor assumes peculiar significance for the small enterprise since management is so concentrated in a few persons. There is far less assurance of continuity of suitable management and very limited opportunity for pooling and checking of ideas in the small enterprise. These considerations contribute to the riskiness of investment in small concerns and enhance the need for close supervision of investments in such concerns. Accordingly the range of potential investors is narrowed.

The fact that so many small concerns are unincorporated severely limits the availability of equity capital to them. In the nature of the case equity capital is limited to that which the proprietor can supply from his resources

and from the earnings of his business unless he is willing and able to interest partners in joining him. In small businesses, both incorporated and unincorporated there is a common and understandable unwillingness to secure equity capital at the cost of surrendering control of the business, as the opportunity to exercise control is frequently a main incentive of the principals in the enterprise. The unincorporated concerns are of course barred from soliciting equity funds from the public and incorporated small firms, even if they can be assured of retaining control, cannot meet the very high costs of floating public issues of stock through the normal marketing channels. In Canada, an exception to the general rule that small companies face insurmountable difficulties in raising equity capital publicly is provided by nascent and small mining and oil companies; we shall discuss their financing briefly below.

Small businesses being largely local in character, dependent for their success to a high degree on one or a very few individuals who are jealous of their control of the enterprise, are generally unable or unwilling to raise equity funds publicly and thus debts held for the most part by individuals, suppliers and bankers, are a tremendously important source of their funds.

Individuals are, then, the most important suppliers of equity funds in small businesses. They are no doubt, too, a source of credit, especially of longer term credit, but one would suppose to a much lesser extent. It has been argued that the growing practice of directing personal savings to financial institutions and pension funds, coupled with the rising rates of personal income taxation would have reduced the propensity of individuals to invest in small businesses, but on the other hand small businesses continue to produce a sizable proportion of the national income, and individuals continue to be their most important source of equity funds. With information that is presently available in organized form it is not possible to argue that there is a pronounced trend upwards or downwards in the proportion of individuals' saving that is flowing into "small" business.

Those who sell to small business have long been important suppliers of short and intermediate-term credit to such businesses. In some instances there are fairly close links between the supplier and the business as in the case of filling stations and some kinds of dealerships. Indeed in some such instances the premises are leased by the operator from the supplier or an affiliate, so that equity in these assets used by the operator is held by the outside business.[33] No doubt arrangements between the firms that sell to small businesses on credit, and the businesses, are varied and adapted to special circumstances.

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33 Of course there are many retailers, small manufacturers, and other small businesses which do not own their premises though they may not be owned by a supplier. Sometimes the owners of business premises concentrate their holdings as in "shopping centres" and in "industrial estates" but these are rather modern developments.

Undoubtedly the most important suppliers of credit to small business are the commercial banks. Banks assist in supplying credit to small business both directly and indirectly. By granting accommodation to those who sell to small business on credit, they assist in the financing of small business. Directly they provide credit through loans against unsecured notes, notes carrying more than one signature and notes secured by various assets of the business excluding real estate. Loans are made for working capital purposes, though from time to time they are also made for other purposes (term loans).[34] Loans that are ostensibly short-term loans for working capital purposes may in fact permit capital expansion and may in fact be renewed in whole or in part many times. Banks may also buy the bonds of small corporations, indeed the corporations may succeed in placing them directly with the banks. There may be isolated instances in which banks have acquired stocks of small companies but it is most unlikely that such holdings would be significant in the over-all picture.

There is a most incredible lack of public information about the banks' portfolio of business loans and of corporate securities. The Bank of Canada makes public each quarter an estimated classification of bank loans according to the industry or function of the borrower. But there is no public information on the distribution of business loans by size of loan or by size of business. Only the most sporadic information is given on the volume of term loans outstanding, and this from time to time in the Annual Report of the Bank of Canada. There is no public information whatsoever on the characteristics of the banks' portfolio of corporate securities except figures on the total size of the portfolio of each bank. We have very little information about the maturity of loans and only a reference occasionally in Bank of Canada reports about commitments to make loans. We shall have to rely on United States data therefore for our picture of bank lending to small business.[35] It is a pity that this is the case,

34 The Governor of the Bank of Canada has expressed the opinion that "the chartered banks . . . do not do a great volume, as far as I know, of small term loans". Minutes of Proceedings and Evidence, Standing Committee on Banking and Commerce, House of Commons, 1956, p. 269.

35 In his 1958 address at the annual meeting of shareholders the Chairman and President of the Royal Bank of Canada, James Muir, made the following remarks:

"Generally speaking, banks are in position to take care of the legitimate needs of all credit-worthy small to moderate borrowers", said Mr. Muir. "For lack of a better yardstick we regard clients having credits with us of $100,000 or less as 'small borrowers'. As a matter of fact, and again speaking generally, the banks have been in a position throughout the tight money period to look after this class of customer.

"In the past few months, however, there has been a great to-do about scarcity of credit for this sector of our economy; and government authorities have apparently become exercised about it. Frankly, I am baffled when I read of these things and I cannot escape the impression that the whole case must be grossly exaggerated, or that, perhaps without realizing it, we may be witnessing an evolution in this field. It may be that a fundamental change is taking place in our economy and that the small merchant is experiencing something that credit cannot help. There is some evidence not only that sales outlets are becoming more and more concentrated, but that sales and production units are developing an increasingly close relationship with one another.

"From the inception of the tight money policy, your bank has made it clear by word of mouth and by repeated written communications to all of our branches that they were still required to deal sympathetically with applications for personal and small business loans.

"In spite of our lending policy there has been a reduction not only in the number of borrowers but a substantial reduction as well in the amount borrowed in this particular field. As far as this bank is concerned, the credit facilities have been available, our Managers have known of this policy, and yet it would seem that small borrowers have not taken advantage of their opportunities to obtain credit."

for in many respects the American practice is or may be different from the Canadian. For one thing Canadian banks do not take a mortgage on real property as prime security for loans in the way in which United States banks commonly do.[36] Secondly, while term lending is practised in Canada one frequently encounters the impression that term loans are not as large a proportion of business loans in Canada as in the United States. Finally the practices with respect to establishing lines of credit and requiring of minimum balances may differ as between the two countries.

Our information is drawn from the report on a sample survey of the commercial and business loans of member banks conducted in October 1957 by the Federal Reserve authorities.[37] It was found in this survey that 3.6 percent of the *amount* of business loans outstanding on the survey date were made to businesses with assets under $50 thousand; 12.9 percent to businesses with assets between $50 thousand and $250 thousand and 15.5 percent to businesses with assets between $250 thousand and $1 million. Of the *number* of business loans outstanding 39.4 percent, 38.6 percent and 12.3 percent respectively were made to businesses in these three asset groups. The average sizes of loans in these three asset groups were $3 thousand, $10 thousand and $40 thousand respectively.

Term loans (loans having an original maturity of more than one year, as the phrase is used in this survey) accounted for some 38 percent of all outstanding business loans. The highest ratios of term borrowing to total borrowing were for concerns with assets of $5 million or more, and lowest for concerns with assets of $250 thousand to $1 million. However, the ratio for the smallest concern (having assets less than $50 thousand) was nearly as high (46 percent) as for the largest concerns.

In 1946, 9 percent of the outstanding loans were made to concerns with assets under $50 thousand and 16 percent to concerns with assets of $50 thousand to $250 thousand. By 1957 these figures had fallen to 4 percent and 13 percent respectively. In 1946 the ratio of the amount of term loans to total loans over all size classes of borrowers was about one-third and was still about one-third in 1955 although it rose to some 38 percent between 1955 and 1957 as we have seen. However, the proportion of the amount of term loans to total loans to businesses with assets under $50 thousand rose from 29 percent in 1946 to 46 percent in 1957.

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36 A bank in Canada may take a mortgage as secondary security against an existing loan, Statutes of Canada, 2-3 Elizabeth II, Chapter 48, Section 78 (1). Canadian banks may also take mortgages as prime security under the Farm Improvement Loans Act and the National Housing Act. Under Section 75 (5) banks may acquire from a corporation securities that are secured on any property and may make loans to the corporation against such securities. The Governor of the Bank of Canada has expressed the opinion that bonds acquired under this section of the Act could not often be the bonds of small corporations. See Minutes of Proceedings and Evidence, Standing Committee on Banking and Commerce, House of Commons, 1956, p. 249.

37 Previous surveys were made in 1942, 1946 and 1955. The results of the 1955 survey are reported in the *Federal Reserve Bulletin* as follows: "Business Loans of Member Banks", April 1956, pp. 327-40. "Credit Lines and Minimum Balance Requirements", June 1956, pp. 573-79. The results of the 1957 survey are reported in the article "Member Bank Lending to Small Business, 1955 - 57", *Federal Reserve Bulletin*, April 1958, pp. 393-411.

In the period October 1955 to October 1957, which was on the whole a period of rather stringent conditions in the capital markets, "loans to large business in most industries expanded much more in dollar volume than loans to smaller businesses. Moreover, loan growth was greater for industries in which large businesses are predominant than for industries in which medium-size and small businesses are relatively important."[38] The amount of loans extended to business with assets under $50 thousand declined 3 percent in this period. "Between 1955 and 1957 all except the largest businesses expanded their term loans . . . much more than their short-term loans. Large businesses obtained most of their long-term financing through the securities markets, but smaller businesses with this alternative less readily available, relied more heavily on banks for this type of financing."[39]

The commercial banks rank head, shoulders and torso ahead of the other financial institutions as suppliers of credit to small business. With respect to some kinds of small business, the instalment finance companies are important suppliers of credit to finance inventories, and of course by undertaking the specialized task of financing customers' purchases they relieve some small businesses of the need to raise funds for that purpose.

The mortgage on real estate is a significant instrument of finance for small business and more so for small business than large business.[40] Business property itself may be mortgaged or residential property may be mortgaged and the proceeds used for business purposes.

Any contribution made by life insurance companies in Canada to the financing of small business is undoubtedly made largely through the instrument of the mortgage. It is impossible however to say what proportion of life insurance company mortgage loans may serve to provide finance to smaller businesses. In a brief to the Commission prepared by Arthur D. Little, Inc., entitled *Financing of Small Business in Manitoba,* filed by the Government of the Province of Manitoba it was stated that "interviews with individual life insurance companies indicated that of the 29-38 percent of total assets invested in mortgages, 32 percent or roughly

38 *Federal Reserve Bulletin,* April 1958, p. 393.

39 *Ibid.*, pp. 394-95.

40 There are of course no direct figures on the use of mortgages to finance unincorporated business. On the basis of the figures in *Taxation Statistics, 1957* (Queen's Printer, Ottawa), Table 5, we may say that for companies with assets under $1 million, mortgages were a more important liability than "other funded debt". For companies with assets between $1 million and $5 million, mortgage debt was smaller than other funded debt for profitable companies and larger for unprofitable companies. For companies with assets greater than $5 million, mortgage debt was generally trivial in relation to all other liabilities. The average ratios of mortgage debt to all liabilities for different sizes of company are shown below:

Assets in thousands of dollars	Ratio of mortgage debt to all liabilities
Under 50	2.3 %
50 - 100	3.8
100 - 250	4.9
250 - 500	5.6
500 - 1000	5.3
1000 - 5000	3.4
5000 and over	0.002

one-third are in business properties, and only 6-8 percent of all mortgages are industrial mortgages" (p. 24). It is known that a large United States insurance company conducting a large volume of business in Canada established in 1957 a special commercial and industrial division of their investment department to concentrate on making investments in companies with assets of between one-quarter of a million dollars and $3 million. It is only through policy loans and mortgages that life insurance companies can make funds available to unincorporated business. In 1956, Canadian life insurance companies held only 1.33 percent of their assets in stocks of Canadian companies and 11.6 percent of their assets in Canadian corporation bonds. A perusal of the details of their acquisition of bonds of Canadian corporations does not suggest frequent investment in bonds of small corporations (even directly placed bonds of such corporations) and in any event small corporations are not prone to raise funds through the issue of bonds.

Mortgage loan companies may contribute to the finance of small business inasmuch as the proprietors of such businesses use mortgages on residential and other properties as a source of business funds. The same is true of trust companies. Trust companies may occasionally also buy the securities of small corporations but their contributions in this way to the finance of small business must in total be very small.[41]

There are a few other institutional sources of funds though there is no organized information about them. For example there are a few companies which buy from lumber and building supply dealers, plumbing, heating and electrical contractors, painters, decorators, landscape gardeners and the like, their time payment notes owed by home owners for home improvements.[42] There are "private banking firms" or development corporations which offer funds to enterprises, in some cases small or medium sized. Occasionally investment companies invest in the securities of smaller corporations. But the total of the amounts supplied to small businesses by all of these miscellaneous institutions must be very small.[43]

41 In one opinion expressed to the Commission it was held that "the trust companies accept virtually no industrial mortgages" and that the loan companies "have invested no more than 5 percent of their mortgage funds in industrial mortgages". *Financing of Small Business in Manitoba,* supplement to the submission to the Royal Commission on Canada's Economic Prospects by the Govt. of the Province of Manitoba, prepared by Arthur D. Little, Inc., p. 27.

42 One such company is Interprovincial Building Credits Limited (incorporated 1950) with assets of about $10 million.

43 There is an organization better known in the United States but rather uncommon here which is called a factoring company. "Modern factoring involves a continuing agreement under which a financing institution assumes the credit and collection function for its client, purchases his receivables as they arise without recourse to him for credit losses, and, because of these relationships performs other auxiliary functions (usually financial or advisory in nature) for its client." (Clyde William Phelps, *The Role of Factoring in Modern Business Finance,* Studies in Commercial Financing No. 1, Commercial Credit Company, Baltimore, 1956, p. 14.) Traditionally in the United States this institution has serviced textile mills but in more recent years it has serviced other manufacturers, wholesalers and retailers. It was estimated in 1956 that about $4 billion worth of accounts receivable were being factored annually in the United States. This is not a large percentage of the total financing of accounts receivable by any means. The service is usually rendered to firms with annual sales volume of one quarter of a million dollars or more and sometimes to smaller firms. (Phelps, *op. cit.,* p. 17.) But it does not appear that the factoring company is at all common in Canada, though one or two companies exist. (On these and other aspects of factoring see Raymond Rogers, "Factors, Bank Financing of Accounts Receivable, Commercial Paper" in Herbert V. Prochnow, *American Financial Institutions,* 1951, pp. 193-221 and Raymond J. Saulnier and Neil H. Jacoby, *Accounts Receivable Financing,* National Bureau of Economic Research, 1943.)

The important federal government institution engaged in furnishing credit to small and medium-sized business is the Industrial Development Bank. The Industrial Development Bank was established in 1944 as part of the programme of the government of the day directed to promoting "high and rising levels of employment". It was designed to supplement the activiites of other lenders in providing capital assistance to industry with particular consideration to the financing problems of small enterprises.[44] The President of the Industrial Development Bank, who is also the Governor of the Bank of Canada has recently described in succinct language the purpose for which the Industrial Development Bank was established as follows:

> "It was to fill what appeared to be a gap in the existing financial machinery of this country. If the gap did not exist, or if it were filled adequately by private enterprise presumably there would be no need for a publicity owned institution of this sort. However, it was found that small business, particularly, had considerable difficulty in getting fixed capital from outside sources. The chartered banks were not in the practise of making loans for fixed capital purposes. Their main business is making current loans, demand loans, for working capital purposes. The larger companies and larger industries might go to the general market and raise capital funds by the sale of securities or perhaps could place a mortgage on their property direct with some large investor, such as an insurance company. Smaller business cannot do that. For one thing the costs of floating public interest securities are out of all proportion to the size of the loan if the loan is for only $15,000 or even $100,000. In addition to that a small business without an established record of earnings — particularly of course a new business — would not have the kind of record to give to investors to encourage them to invest".[45]

The first point to stress is that the Industrial Development Bank has been designed to supplement the existing facilities in the capital market. As a matter of day-to-day administration, there is considerable co-operation between the Industrial Development Bank and the chartered banks, each from time to time referring applicants for loans to the other.[46] The President of the Industrial Development Bank has said "The first thing we have to ask anybody is: why cannot you finance this elsewhere".[47] In fact, in laying out the business and powers of the Bank, the governing act stipulates that the Bank may furnish funds when "credit or other financial

[44] This sentence is a paraphrase of part of the Preamble to Governing Act. See *Revised Statutes of Canada*, 1952, Chapter 151.

[45] Standing Committee on Banking and Commerce, House of Commons, Minutes of Proceedings and Evidence, No. 7, 1956, p. 245.

[46] Mr. J. E. Coyne, the President has stated: "I do not think we have ever made a loan which the chartered banks would have made at the same or a higher rate of interest which was agreeable to the borrower". *Ibid*, p. 248.

[47] *Ibid*, p. 272.

resources would not otherwise be available on reasonable terms and conditions".[48]

It is largely in consequence of this requirement that the Bank has concentrated on the providing of fixed capital. Indeed it was stated at the 1956 sessions of the Banking and Commerce Committee that the Bank has never made a loan purely for working capital purposes.[49]

In the title of the Bank the word "industrial" appears. The Bank makes loans to industrial enterprises but not to establishments providing commercial services such as retail or wholesale outlets, hotels and tourist establishments, garages and theatres and not to farming or fishing enterprises. From time to time the Act has been revised to extend the list of eligible borrowers, the most recent of the extensions being in 1956. As matters now stand the Bank may lend to "an enterprise in which is carried on the business of:

(i) manufacturing, processing, assembling, installing, overhauling, reconditioning, altering, repairing, cleaning, packaging, transporting or warehousing of goods,

(ii) logging, operating a mine or quarry, drilling, construction, engineering, technical surveys or scientific research,

(iii) generating or distributing electricity or operating a commercial air service, or the transportation of persons, or

(iv) supplying premises, machinery or equipment for any business mentioned in subparagraph (i), (ii) or (iii) under a lease, contract or other arrangement whereby title to the premises, machinery or equipment is retained by the supplier".[50]

There is an intimate relationship between the Industrial Development Bank and the Bank of Canada since the Act makes the board of directors of the two institutions identical. The Bank of Canada holds the outstanding stock of the Industrial Development Bank in the amount of $25 million and also all of its outstanding bonds and debentures, which at the end of December 1957 amounted to $37 million. The Bank is allowed to borrow from the public but has never done so.

The Bank is permitted to lend or guarantee loans to persons including corporations and in addition is permitted to enter into underwriting agreements with a corporation in respect of all or part of a stock or bond issue and to buy all or part of an issue of a corporation's securities either from the corporation or a shareholder, as underwriter. The Bank is entitled to hold all of the various forms of security against its loans that are

48 Section 15 (1) (b)

49 Minutes of Proceeding and Evidence, p. 273.

50 An Act to amend the Industrial Development Bank Act, 4-5 Elizabeth II, 1956.

available to chartered banks and in addition it is authorized to hold mortgages on real estate and chattel mortgages on movable property.

For the most part the advance of funds by the Bank is in the form of loans made to finance fixed capital requirements of the borrower. These loans may be for any period but the term is usually between one and ten years with the average term being six or seven years.[51] There is no statutory limit to the rate the Bank may charge. The normal rate charged at the beginning of operations was 5 percent. A few years later it was raised to 5½ percent. In 1952 it was increased to 6 percent and was raised once again to 6½ percent in 1956. On November 18, 1957 it was reduced to 6 percent. The Bank has guaranteed loans, indeed at September 30, 1950 the amount of guarantees was nearly $3.5 million. Since that time however guarantees have dwindled to less than $100 thousand.

For the first ten years of its operations, at least, the Bank has not used its authority to underwrite issues of securities.[52] That this may be an avenue of future development is suggested by a remark made by Mr. Coyne in 1956.[53]

The Industrial Development Bank has acquired the stock of its debtors from time to time. It is recorded that at September 30, 1955 of a total of loans and investments outstanding in the amount of $44 million $250 thousand was represented by investments, investments in the stock of ten different borrowing companies.[54] There is no public evidence that the Bank has ever acquired the stock of a company not in its debt. There is a statement in the record to the effect that if the Bank were asked to make a loan which looked very large relative to the total equity investment in the firm, the Bank would consider advancing part of the funds as an investment in equity (usually preferred stock) rather than as a loan.[55] It is clear that the Bank has not been prepared generally to provide equity rather than debt financing.[56]

The total liability of the Bank arising from its own debenture issues and from guarantees and underwriting agreements is limited by statute to

51 Standing Committee on Banking and Commerce, House of Commons, Minutes of Proceedings and Evidence, 1956, p. 269.

52 D. G. Marble, "Industrial Development Bank—The First Ten Years", *Canadian Banker*, Summer 1955, p. 25.

53 See Standing Committee on Banking and Commerce, Minutes of Proceedings and Evidence, 1956, p. 274.

54 *Ibid.*, p. 299.

55 *Ibid.*, p. 297.

56 The Industrial Development Bank Act states that the Bank may acquire stock "with a view to resale". It may be that some doubt as to the precise meaning of this phrase has inhibited the Bank in taking an equity position. It seems likely, however, that the Bank has assumed that if it takes a reasonable attitude toward the legitimate difficulties of a business in meeting mortgage loan commitments it will provide all or most of the advantages that purchase of equity could provide and yet retain the right to exert pressure on the debtor if necessary. The General Manager of the Bank has stated: "Where accounts get into difficulties we make strenuous efforts to help. In some cases, the worst service we could do our client would be to not keep him under steady pressure. In others it is a question of waiving or extending instalments. We try to be realistic, we try to be patient, but never to give up the ship and never to let it drift." (Address by Mr. S. R. Noble, General Manager of the IDB at the Fifth Annual Conference of the Association of State Planning & Development Agencies, May 10th, 1950, in the Hotel New Yorker, N.Y.)

three times its paid up capital and reserve fund. As at the end of 1957, this limit was approximately $105 million, the corresponding liabilities were approximately $37 million. The aggregate of the individual loans, and liabilities under guarantees or underwriting agreements and of expenditures for corporation securities held by it in amounts exceeding $200 thousand is limited to $75 million. At the end of 1957 this aggregate was just over $34 million.

The distribution of the Bank's current authorizations (loans, investments and guarantees) as of September 30, 1957 is shown in Table 6.20. It will be noted that a very substantial proportion of the amount authorized is in the category "over $200 thousand". Mr. Coyne has testified that over the first 11 years of the Bank's activities the highest loan made was for $4 million (this was connected with a defence project); and that 7 other loans of $1 million or over have been made.[57] Nearly 30 percent of the credits are for amounts of $25 thousand or less and some 55 percent of the credits are for amounts of $50 thousand and under.

The industrial distribution of the current authorizations as of September 30, 1957 is shown in Table 6.21. Commercial air services draw upon the resources of the Bank very heavily as may be seen; so also do firms in the wood products industry and in the iron and steel products industry which includes machinery and equipment. The loans of the Bank are distributed among a wide variety of industries.

The provincial distribution of the loans is shown in Table 6.22. Loans are made in all provinces and in the Yukon and Northwest Territories.

Table 6.20

INDUSTRIAL DEVELOPMENT BANK
LOANS, INVESTMENTS AND GUARANTEES

Size classification of curent authorizations at September 30, 1957

Size of credits (thousands of dollars)	Number of credits %	Amount authorized %
5 and under	.9	a
5- 25	29.9	4.6
25- 50	24.4	8.7
50-100	22.5	15.6
100-200	12.1	17.0
Over 200	10.3	54.0
Total	100.0	100.0
Total credits	102.8	—
Total amount authorized (millions)	—	111.5

a Less than 1/10 of 1 percent.

SOURCE: Annual Report of the Industrial Development Bank, 1957, p. 10.

57 At least this last statement is our interpretation of the sentence "There are two over $2 million and five from $1 million to $3 million over a period of 11 years". *Ibid.*, p. 300.

Table 6.21

INDUSTRIAL DEVELOPMENT BANK
LOANS, INVESTMENTS AND GUARANTEES

Industrial distribution of current authorizations as at September 30, 1957

Industry	Amount authorized %
1. Commercial air services	12.9
2. Wood products	12.5
3. Iron and steel products (including machinery and equipment)	11.2
4. Foods and beverages	8.5
5. Non-metallic mineral products	7.8
6. Textile products and clothing	7.2
7. Paper products (including pulp)	5.8
8. Chemical products	5.5
9. Refrigeration	4.8
10. Electrical apparatus and supplies	4.5
11. Transportation equipment	3.5
12. Mining	2.4
13. Printing, publishing and allied industries	2.1
14. Industrial buildings	2.0
15. Miscellaneous manufacturing industries	1.9
16. Non-ferrous metals products	1.8
17. Transportation and storage (other than 1 and 9 above)	1.7
18. Products of petroleum and coal	1.3
19. Construction	1.1
20. Forestry	.8
21. Rubber and leather products	.5
22. Generating and distributing of electricity	.1
Total	100.0
Total amount authorized (in millions)	$111.5

SOURCE: Annual Report of the Industrial Development Bank, 1957, p. 7.

Nearly two-thirds of the amount authorized as of September 30, 1957 was in the central provinces of Ontario and Quebec.

From the beginning of its operations in late 1944 until the end of September 1957, the Bank has authorized loans, investments and guarantees of almost $200 million. Its disbursements, (excluding guarantees) have totalled nearly $150 million. This writer has no knowledge of the proportions of disbursements, loans or guarantees granted to newly established businesses.

In several of the provinces there are special government agencies designed to supplement in various special ways the credit facilities provided to small business through other channels. These are in provinces other than Ontario, Quebec, Manitoba and British Columbia. In Nova Scotia, under the Industrial Loan Act the government may lend or guarantee loans to certain processing or manufacturing industries. In New Brunswick, under the Industrial Development and Expansion Act loans may be granted to selected industries which promise to develop certain areas

Table 6.22

INDUSTRIAL DEVELOPMENT BANK
LOANS, INVESTMENTS AND GUARANTEES

Provincial distribution for current authorizations as at September 30, 1957

Province	Amount authorized %
1. Quebec	33.0
2. Ontario	30.4
3. British Columbia	16.4
4. Alberta	5.1
5. Prince Edward Island	5.0
6. Manitoba	4.6
7. New Brunswick	1.7
8. Nova Scotia	1.5
9. Saskatchewan	1.4
10. Yukon and N.W.T.	.5
11. Newfoundland	.4
Total	100.0
Total amount authorized (in millions)	$111.5

SOURCE: Annual Report of the Industrial Development Bank, 1957, p. 9.

or processes, and which do not succeed in obtaining capital from another source. The Province of Prince Edward Island provides assistance in establishing industrial plants to process agricultural, horticultural and fishery products within the province. In Newfoundland the government has assisted industry by guaranteeing bank loans or bond issues of companies. The government operates four special lending agencies: The Co-operative Development Loan Board, the Fisheries Development Loan Board, the Industrial Development Loan Board, and the Tourist Development Board. In Saskatchewan, through the Industrial Development Fund, the province lends or guarantees loans to a wide variety of business enterprises. In Alberta, business may borrow from the treasury branches operated by the treasury. Through the Provincial Marketing Board manufacturing concerns may obtain assistance in financing inventory.[58]

d. Small mining and oil development companies

It was mentioned earlier that small, nascent mining and oil companies represent an exception to the general rule that small companies face insurmountable difficulties in publicly raising equity capital. We should like now to develop this theme briefly in concluding the factual review of some aspects of business finance. Financing the development of Canada's mineral and oil resources is an important topic and, in this writer's view, one of endless fascination. We should have liked to treat

[58] This very brief account of provincial government agencies has been adapted from that given in *Small Business Manual*, published by the Department of Trade and Commerce, Ottawa, 1958, pp. 74-7.

it in considerable detail in this volume, especially as apparently it has never been accorded exhaustive description and analysis in any published work. The subject cries for attention. Unfortunately time and resources have not permitted conducting the necessary research, and in any event full treatment in appropriate historical perspective would occupy an entire volume.[59] We shall limit ourselves to a few highlights of the financing of economic activity in this field, and confine our attention to the financing of the smaller endeavours. There is a trend toward yet greater participation in exploratory and development work in the mining and oil industries by the very large operating companies and by mining finance and holding companies.

Bringing mines or oil wells into production is a highly speculative business involving opportunities for striking, or even fabulous gains as well as staggering losses. Canadian investors apparently in quite large numbers have, over the years, been willing to take up the shares, priced at 10 cents or more (and at one time even less), of these companies. One suspects that the attitude of the buyers in many cases resembled that of the participant in the football pool or the devotee of the race track. Investment in mining and oil shares has been a kind of gambling sport for many Canadians. The willingness of Canadians to take fliers in these risky ventures has been of tremendous importance in the development of the mining and oil industries as we know them today. But willingness to take risks has not been confined to the general share-buying public. The independent prospectors, the professional promoters, the professional investors have all shouldered the risks and shared the romance of developing these great resource industries.

In a general way one may distinguish three broad stages in the development of a producing mine.[60] First there is the prospecting stage, the discovery of promising ground and the staking out and registering of a claim to it. Next there is the stage of exploring the property first above ground and then below ground to determine the extent and quality of the ore. Finally there is the stage of preparing the mine for actual production of ore and of erecting a mill to concentrate the ore. It is with the financing of the first two and especially the second stage of the operation that we shall be particularly concerned here in the context of "small business" ventures; once a mining property has been discovered and explored and found worthy of bringing into production the undertaking ordinarily ceases to be "small business". Of course all stages may be, and increasingly are, carried out under the aegis of big business, that is by the large established companies. But traditionally, and still to a very considerable degree, they

59 There are chapters on financing in a most interesting account of the human side of Canadian mining by Arnold Hoffman: *Free Gold, The Story of Canadian Mining*, (New York and Toronto) 1947.

60 We shall concentrate our description here on the development of mines rather than oil and gas ventures.

are not. The financing required for the first stage is fairly limited, perhaps from $25 thousand up to 8 or 9 times that amount. Unless the prospectors are the paid employees of the large established mining concerns they will be financed privately, ordinarily, and not by funds secured through public subscription. The second stage is almost invariably financed by public issues of stock and may require one-half a million up to two or more million dollars. The third stage, actually bringing a mine into operation after proving up enough reserves, becomes big business either because the operation is taken over then by an existing large concern or because the sums required range from one to five or more million dollars. The financing of the third stage is accomplished perhaps to some degree out of retained earnings (if it is financed by existing companies) but largely through the further issue of stock or the issue of convertible bonds which are attractive in some cases to investors, (especially when the concern enjoys a firm government contract as is the case with several recent uranium developments).

The financing of independent prospectors is usually accomplished by the prospector himself from his own resources or by raising money from friends and acquaintances or more formally by the formation of a syndicate. A syndicate is arranged by selling "units" for perhaps $100 each, on the understanding that each purchaser will participate in the fortunes of the prospector in proportion to the number of units he has purchased. If the prospector is successful in discovering ground he regards as promising, he will stake claims, perhaps an area of 800 acres or so comprising some twenty claims, have these recorded at a recording office so as to guarantee his title, and dispatch samples of ore to an assaying office requesting that they be assayed for specific minerals. It will then be necessary to raise money for "developing" the property, that is for detailed examination of the surface, and if the results warrant for underground examination with a view to discovering the quality and extent of the ore. This brings us to the second stage of financing.

If the claims are not sold or optioned to a larger established mining company the usual procedure is to seek to interest a mining "promoter". There is infinite variety in this business; for example, the prospector and his syndicate may themselves set up a company to develop the claims or perhaps a professional promoter may have been among the members of the syndicate. In any event an arrangement is arrived at with either a new company or an existing "inactive" or "dormant" company controlled by the promoter. By this arrangement the company takes an option to buy the claims within six months and usually offers some cash to the prospector or the syndicate at this stage in return for the option. The company further agrees to spend a stipulated amount in the next six months in developing the claim and also undertakes to grant a block of stock in the company to the prospector or syndicate in the event that the option to buy the

claims should be exercised.[61] The capitalization of the company may be of the order of three to five million dollars made up of three to five million shares having a par value of one dollar.

Next, the promoter enters into an arrangement with the company whereby he underwrites a block of shares perhaps 100,000 or 200,000 at 10 or 15 cents so as to provide the company's treasury immediately[62] with an amount of from $10,000 to $30,000. At the same time the promoter is granted options to buy further blocks of stock in amounts up to 200,000 shares at higher prices for each successive block. From this point, if all goes well the promoter succeeds in selling stock at prices higher than he pays for it, and as news comes in from the property (or elsewhere) to stimulate the interests of the public buyers, the promoter exercises his options adding to the company's funds and adding to his own profit.

In a successful promotion the company in due course will exercise its option to buy the properties outright and the vendor stock will be disposed of.[63] As the company prospers it may be necessary from time to time to raise more capital than was provided by the original underwriting agreement. When ore of suitable quality and quantity has been "proved up", the financing of the mill and final arrangements for production will be undertaken and this will more closely resemble the regular financing of industrial companies and may even include the issue of bonds or convertible debentures.

In an unsuccessful promotion, if news from the property is lacking or discouraging and the price of the stock starts to fall the promoter will, if the situation is not yet clearly hopeless, seek to support the price by buying stock. This action may tide the venture over rough spots until hopeful news comes in concerning the price of the metal or the progress at the property, but if no good news develops, the promoter will ultimately cease to support the stock, its price will plummet and the company will become dormant.

Clearly, the role of the promoter is a vital one in this type of financing. Promoters have been slandered, some have been unscrupulous, many have made fortunes, but they have secured funds for the development of mine, oil, and gas properties. They are skilled in the art of buying and selling speculative shares, their reward is not a salary, it is profit on their transactions. They may buy controlling interest in companies whose shares are cheap, and by acquiring new properties for the companies or by other methods of rekindling interest in them they may induce public buying which will permit them to sell their shares at a profit as well as additional

61 This stock granted to the vendors of the claims is an example of what is often referred to as "vendor stock".

62 Usually at least one-half is paid immediately and the rest within a stipulated period, say 60 days.

63 Under present practice 10 percent of the vendor stock is actually given to the vendors and the other 90 percent placed in escrow to be held in trust and released to the vendor as stock is purchased from the company's treasury.

shares from the company's treasury. They may organize new companies in the manner we have described or reorganize old companies to serve their purposes. Their methods are wonderfully various; but we must not dwell on them here.

The role of the stock exchange, especially the Toronto Stock Exchange in financing the development of mine, oil and gas properties must be noted, for it is a most important organization in facilitating not only the trading in mining and oil stocks after they have been issued but also in the primary distribution of such securities to the public. A new company may apply for listing on the exchange and may expect to be granted the privileges of listing if work has progressed to the point where the company's engineer recommends underground development, if the company has enough shareholders (at least 100) to guarantee a wide market, if it has adequate immediate resources to carry out its arranged programme and unissued stock left in the treasury for further financing. Once listed, the shares being distributed by the promoter or his agent may be sold on the exchange to the public. If a listed company becomes dormant it does not on that account lose its listing, of course, and if it is revived and further stock from the treasury underwritten and optioned this further stock may be sold to the public through the facilities of the exchange.

The market in unlisted shares, the over-the-counter market, is also of course of great importance and a considerable volume of primary distribution takes place through this market. This market is becoming less important than the listed market in this connection, however. Thus, W. W. Cameron, Counsel of the Ontario Securities Commission has written:

> "The function of the broker-dealer in the marketing of securities listed on stock exchanges expanded greatly between 1950 and 1956. The participation by the broker-dealer in primary distribution to the public through the medium of stock exchanges has become an extremely important factor in securities marketing in Ontario. Moreover, the importance of raising equity capital through the sale of common shares not listed in any stock exchange has diminished proportionately between 1950 and 1956 . . . At the present time, in Ontario, primary distribution of shares to the public through the medium of stock exchanges constitutes the most important method of corporate financing when the securities being distributed are of the more speculative class".[64]

We shall consider the role of the stock exchange further below in our discussion of the regulators of the flows of funds in this area of the financing of the development of mineral, oil and gas properties. We turn now to the second part of this chapter on the general theme of the regulators of the flows of funds in the business sector.

[64] W. W. Cameron, "Securities Legislation, Administration and Marketing in the Province of Ontario, 1956", *Bulletin of the Ontario Securities Commission*, November 1956, pp. 27-8.

C. The Regulators of the Flows of Funds

In this part of the chapter we shall discuss the regulators of the flows of funds as they impinge on the decisions made by (non-financial) business. Regulators in the form of taxes will be taken up first, then prices of goods and securities and finally miscellaneous laws and conventions that affect business decisions regarding the flows of funds.

1. Taxes

The income tax will be the main topic of discussion in this section. Undoubtedly sales taxes, excise taxes and customs duties affect the relative prospects of different industries and firms and thus indirectly at least the channelling of funds to business users. We shall not attempt to trace or analyze these effects however. The income tax has already been discussed in Chapter 5 from the point of view of the consumer-investor. Here we shall concentrate on the tax on business income. We shall be concerned with the effects of the income tax law on business saving and business investment. We shall describe the effects of the provisions of our income tax legislation on the attractiveness to business of various forms of external financing. We shall review the provisions of this legislation which grant special concessions to business in certain industries or businesses with particular characteristics.

In Canada, a corporation must pay tax on its current profits whether they are distributed or not and a business proprietor or partner must pay tax on the profits of his business whether they are distributed or not. Thus the tax on business income directs funds to the control of the government which would otherwise have remained in control of business. The extent of the diversion differs however as between incorporated business and unincorporated business and as between small business and large business. Earnings of unincorporated business are taxed at the rates of taxation that apply to individuals, corporate income is taxed at a special set of rates applying only to corporations. There is an element of progressivity built into both rate structures. Thus with the personal income tax, the marginal rate and the average rate increase with income as is also true with corporate income but the progressivity of the corporate tax is less than that of the individual tax as may be seen from Chart 6.1 or Table 6.23.

a. The question of the shifting of the corporation tax

In considering the effects of increases in corporation tax rates on saving and investment and on the sources from which corporations draw their funds one is immediately confronted with the question as to the extent to which the corporation tax is shifted from the corporation or its stockholders to other groups. This question is exceedingly complicated and unfortunately we cannot draw upon any widely accepted body of doctrine. Changes in the income tax never take place in isolation, as it

Table 6.23

RATES OF TAXATION IN CANADA ON CORPORATION AND INDIVIDUAL INCOMES

Taxable income	Tax rate — Percent	
	Individuals	Corporations
$ 1,000	11.0	20.0
2,000	14.5	
4,000	16.3	
6,000	17.5	
8,000	19.1	
10,000	20.9	
12,000	22.9	
15,000	25.9	
25,000	32.8	
40,000	38.5	30.1
60,000	43.3	35.8
90,000	48.2	39.5
125,000	52.4	41.6
225,000	59.3	44.0
400,000	65.3	45.3
500,000	67.8	45.7
1,000,000	72.9	46.3

NOTES: The tax rates for both individuals and corporations are calculated so as to include the effects of the revisions made in December 1957, and both include the Old Age Security Tax. The individual rates do not allow for the surtax of 4 percent on all investment income over $2,400 nor do they allow for the tax credit on dividends from Canadian companies. The reminder should perhaps be offered that the definition of taxable income applicable to individuals is quite different from that applicable to corporations.

were, so that we may confidently attribute subsequent developments to the impact of the tax. In this, the problem at hand merely reflects the great challenging frustration of all economic study. It is not that changes in the corporation tax have been small; since the twenties the tax as a proportion of corporation profits has risen from 10 percent to 50 percent, roughly speaking. But other changes — depression, war, post-war inflation and productivity increases — have been equally dramatic. As a consequence of the difficulties of the subject there is no settled view among economists, so far as this writer can determine, as to who pays an increase in the corporation tax in each period following the increase. The shiftability of the corporation tax is particularly germane to our discussion, but obviously we would be led much too far afield if we undertook to develop the subject at any length. Our comments, accordingly, will be brief and somewhat assertive.[65]

65 The reader may wish to consult the following references which bear in whole or in part on the subject:

Richard Goode, *The Corporation Income Tax*, New York, 1951. Dan Throop Smith, *Effects of Taxation, Corporate Financial Policy*, (Cambridge, Mass.), 1952. Nicholas Kaldor, *An Expenditure Tax*, London, 1955. Richard E. Slitor, "Economic Aspects of the Tax on Corporate Income", in *Lectures on Taxation of Business Enterprise*. University of Michigan Law School, 1952, pp. 28-41. Diran Bodenhorn, "The Shifting of the Corporation Income Tax in a Growing Economy", *Quarterly Journal of Economics*, Vol. LXX, 1956, pp. 563-80. Merton H. Miller and John P. Shelton, "Effects of a Shifted Corporate Income Tax on Capital Structure", *National Tax Journal*, Vol. VIII, 1955, pp. 252-59. John Lintner, "Effect of Corporate Taxation on Real Investment", *American Economic Review*, Vol. XLIV, 1954, pp. 520-34. John Lintner, "Effects of a Shifted Corporate Income Tax on Real Investment", *National Tax Journal*, Vol. VIII, 1955, pp. 229-51. B. V. Ratchford and P. B. Han, "The Burden of the Corporate Income Tax", *National Tax Journal*, Vol. X, 1957, pp. 310-24.

There seems to be little difference of opinion concerning the immediate impact of an increase in corporation taxes. Profits or disposable income of corporations are reduced as an immediate consequence of the tax and the rate of return on invested capital, net earnings per common share and the margin of return over sales are accordingly lowered. If the sum of retained earnings and dividends is certainly reduced it is not so obvious how the reduction will be divided as between retained earnings and dividends. It may perhaps be presumed however, that in general, corporations will be unwilling to risk contributing to a decline in the value of its shares by reducing dividends to the full extent of the tax. If this presumption is correct, the ratio of dividends to corporate disposable income will increase as an immediate consequence of the tax. Thus:

> "Though the relative importance of retained earnings may be increased, the absolute amount of earnings available for distribution and retention is decreased by an unshifted tax. Unless the entire amount is taken out of dividends, which is unlikely, the amount of retained earnings will also be decreased".[66]

Even though dividends may not be reduced to the full extent of the tax increase it seems likely that the prices of shares will fall. If dividends are reduced this will contribute to the depressing of share prices. But the very reduction in earnings may serve to depress share prices. It would seem therefore that the ratio of net earnings to prices of shares will fall, the amount of the fall being smaller the more nearly the percentage fall of security prices approximates the percentage fall in earnings induced by the increase of taxes.[67]

The fall in share prices, to the extent that it occurs is likely to establish a preference on the part of the corporations for bond financing as against financing through the issue of equities either in the form of preferred stock or common stock. We shall revert to this matter below and discuss it in some detail.

The immediate impact of the tax would, then, seem to fall on the corporations and their existing shareholders. In particular the margin of profits after taxes over sales and earnings after taxes per share of common stock both fall. The earnings per share ratio could be restored by a sufficient increase in profit margins. Clearly if product prices could be raised or, say, wage cost per unit of sales lowered, profit margins would be increased. In the world of perfect competition described by some economists this particular route to higher profit margins would be ruled out by the consideration that the level of a firm's output at which marginal costs

66 Dan Throop Smith, *Effects of Taxation, Corporate Financial Policy, op. cit.*, p. 90.

67 At this point our discussion touches upon the theory of tax capitalization or amortization as applied to corporation income taxes. We shall not enter into this technical matter here. Discussion if not clarification of it may be found in Richard Goode, *The Corporation Income Tax, op. cit.*, pp. 68-71, J. A. Stockfish, "Common Stock Financing and Tax Capitalization", *National Tax Journal*, Vol. VII, 1954, pp. 182-86, Dan Throop Smith, "Rejoinder", *ibid*, pp. 186-88, and D. T. Smith, *Effects of Taxation, Corporate Financial Policy, op. cit.*, Chapter III.

equal marginal revenues is undisturbed by a tax increase.[68] On the other hand, in a less rigidly organized world, where competition is "imperfect", uncertainty is rife, and "full-cost" methods of fixing prices (that is, methods whereby prices are fixed as a specified margin over cost) are common, a rise in the general corporation tax rate may result in rises in product prices rather readily if taxes are viewed as costs by the price setters. Similarly the boards that fix rates charged by public utilities might be impressed by the argument that prices of the utilities' services should be set so as to permit the earning of a specified rate of return on invested capital. Accordingly, in this field the rather slower working of administrative machinery might lead to a shifting of the tax. It seems hard to conceive that the tax would be shifted by deliberate efforts at forcing down wages.

In periods of general inflation of prices induced by excessive demand for goods and services, if product prices rise more rapidly than wage rates, profit margins will increase and an increase in corporation taxes can be shifted at least for the duration of the inflation.[69]

However, it is entirely possible that over longer periods, profit margins might be increased without the necessity of actually pushing prices up or wages down. Some of the fruits of the increases in productivity so characteristic of modern industrial economies may be captured by corporations and used to restore levels of earnings per share to pre-tax levels. Productivity increases in and of themselves create a downward pressure on prices and an upward pressure on money wages. Resistance to these pressures by corporations in the hurly burly of bargaining and pricing will, if successful, secure higher profit margins.

If productivity increases are of the capital-saving variety so that generally in the economy there is a downward drift in ratio of capital to output, the restoration of pre-tax levels of earnings per share will be facilitated. The greater the fall in the capital-output ratio the less is the increase in profit margins required to raise earnings per share through a given interval.[70]

We have focused our attention in this discussion of the shifting of the corporation tax on the figure of earnings per share. It is of course not a perfectly satisfactory indicator of the degree of shifting of a corporation income tax. That this is so is quickly seen when it is remembered that the tax creates a bias in favour of bond financing as opposed to share financing. If the tax leads to a progressive reduction in the proportion

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68 That is, if we neglect the effects of the expenditure of the tax proceeds on the demand for the firm's products. See for example, Duncan Black, *The Incidence of Income Taxes*, London, 1939, pp. 14-16.

69 A variation of this argument, stressing increases in demand, but relying on the tax increase producing a significant deterrant to investment in periods of increasing demand, is presented by Diran Bodenhorn, "The Shifting of the Corporation Income Tax in a Growing Economy", *op. cit.*

70 This proposition is stated roughly in the text. In particular, the proposition would not hold if expansion were financed by issues of shares at progressively lower prices. On the other hand one might expect that if an increase in tax were in the process of shifting, that fact of itself would engender increases in share prices.

of shares in the capital structure, the increase in leverage will induce a more rapid increase in earnings per share. But under these circumstances of increased leverage, it will not be true that when, in the process of tax shifting, earnings per share attain their pre-tax levels, the marginal rate of return on invested capital will have been raised to its pre-tax level. Undoubtedly it is the marginal rate of return on invested capital that is the relevant concept. It raises many more empirical problems than the concept of earnings per share however, and that is why we conclude the argument in terms of the latter.

The above assertions on the shifting of corporation income taxes suggest that the tax may be shifted. The shifting may be more or less rapid depending on a variety of circumstances including the rate of inflation in the economy and the rate of increase in productivity. The shifting over any specified interval of time following a tax increase may be in whole or in part. Thus Kaldor writes:

> ". . . .provided sufficiently long periods are taken into account, the taxation of business profits *does* tend to get 'passed on', in the form of higher profit margins, and thus its true incidence is shifted from the shareholders to the general consumer. . . . . The effect may be concealed moreover if, on account of a reduction in the amount of capital required per unit of output, a higher rate of return on investments can be secured with unchanged margins of profit on turnover".[71]

Undoubtedly the tax falls immediately on the shareholder. Undoubtedly too however, some of it at least is passed on to consumers or workers either readily or slowly. While it would be wrong to analyze the effects of taxes exclusively in terms of the assumption that they are unshifted, there is undoubtedly an interval following changes in tax rates where a part of the tax is unshifted. These considerations must guide us in our review of taxes as regulators of the flows of funds in the business sector of the economy, and we shall refer to them and amplify them in some respects in what follows in the next two subsections.

b. Taxes and business saving and investment

Business saving is generally regarded as being in one of two forms, retained earnings or depreciation allowances. The two are related of course at a given level of business receipts, the higher are depreciation allowances the lower profits will be both before and after taxes, though the after-tax profits will depend on the amount of depreciation which can be charged against income for purposes of tax assessment.

Retained earnings have been referred to above in connection with the discussion of the immediate impact of an increase in tax rates. It was

[71] Nicholas Kaldor, *An Expenditure Tax, op. cit.*, p. 169.

suggested there that the absolute amount of retained earnings would be decreased but that the ratio of retained earnings to dividend payments would rise. Retained earnings will, naturally, grow in absolute amount as the economy grows, but will they be expected to grow more or less rapidly than dividend payments? To the extent that the tax is shifted, retained earnings might be expected to resume their pre-tax relation to dividends. However, as we shall argue below, an increase in tax rates in and of itself creates a permanent advantage of bond financing over financing through the issue of stock. Hence, as the economy grows we might anticipate that corporate external financing would, in the face of higher tax rates, be concentrated progressively in bond issues. This would tend to prevent the fall in the ratio of retentions to dividends and indeed induce an increase in the ratio. Of course if dividends per share rise more rapidly than profits after taxes this change in the ratio would not develop, but as we have suggested earlier, dividends appear to change in lesser proportion than income after taxes. It must be noted also that bond financing involves its own risks — the risks of having to meet fixed charges out of fluctuating incomes — and there are therefore limits to the extent to which corporations will finance through bond issues, but these limits to some extent operate to restrict dividend pay-outs and enhance retained earnings.

Over and above these considerations there are others related to the tax on individual incomes. As was argued in Chapter 5, dividends paid to individuals are received largely by persons in the higher income brackets. But the marginal rate of taxation on such persons' income is higher, and typically has been higher than the marginal rate on corporation income.[72] Moreover, there is no capital gains tax as such in Canada, and there is at least a presumption, if not conclusive evidence, that shareholders have been content to see dividends rise at a lesser rate than earnings in the hope of winning their advantage through the sale of shares for a capital gain. It is of course necessary for share prices to rise in order for this realization of capital gain to be possible and it is often contended that share prices are more responsive to dividends than to earnings. However that may be, it seems that the relationship between the marginal rates of individual tax applying to shareholders and of the corporation tax combined with the legal definition of income for tax purposes have contributed to a more rapid rise of retained earnings than of dividends.

In Table 6.24 the ratio of retained profits to profits after taxes in the twenties is compared with this ratio in more recent times when tax rates on corporations (and individuals) have been very much higher. Figures for both Canada and the United States are included. These figures reflect the very sharp increases in corporate tax rates over the last three decades. In Canada, taxes amounted to some 10 percent or less of profits in the late 1920's, in the middle fifties they have been nearly 45 percent. Retained

[72] Even allowing for the 20 percent tax deduction on dividends from Canadian companies in a great many cases.

profits are a higher proportion of income after taxes on the average now than they were in the 1920's in both Canada and the United States. It would seem that on the average over the years covered in the table, taxes have been a higher proportion of corporate profits in the United States than in Canada and that retained profits have been a higher proportion of profits after taxes in Canada than in the United States. It seems entirely likely however, that retained profits are a larger proportion of profits after taxes of small corporatons than of large corporations and that Canadian companies are smaller on the average than United States companies.

Table 6.24

CORPORATE TAXES AS A PERCENTAGE OF CORPORATE PROFITS AND RETAINED PROFITS AS A PERCENTAGE OF CORPORATE PROFITS AFTER TAXES, CANADA AND THE UNITED STATES AVERAGES OF SELECTED YEARS

	Canada		United States	
	Taxes as a percentage of profits	Retained earnings as a percentage of profits after taxes	Taxes as a percentage of profits	Retained earnings as a percentage of profits after taxes
1922-29	8.3[a]	50.9[a]	14.7	34.5
1938-40	26.1	37.0	27.4	30.7[b]
1946-48	38.9	59.4	38.9	61.8
1949-51	43.1	48.7	46.3	54.2
1952-54	48.5	49.0	53.6	42.5
1955-56	44.2	55.3	50.4	45.5

a 1926 to 1929.

b 1939 to 1940, retained earnings not shown in 1938, being negative.

SOURCES: Canada: Dominion Bureau of Statistics, *National Accounts: Income and Expenditure, 1926-1956.*
United States: 1922-29, Daniel H. Brill, "Financing of Capital Formation" in National Bureau of Economic Research, *Problems of Capital Formation*, Princeton, 1957, p. 158.
1938-56, *Productivity, Prices and Incomes*, materials prepared for the Joint Economic Committee, 85th Congress, 1st Session, 1957, Tables 21 and 25, pp. 103 and 108.

In Canada the first $25 thousand[73] of corporate taxable income is now taxed at the rate of 20 percent while income above that level is taxed at the rate of 47 percent. The individual income tax rates are also progressive as we have noted, being lower for low incomes than high incomes and indeed lower than corporation tax rates at the lowest levels of taxable income. This progressivity of the corporation tax and of the individual income tax clearly favours the small business, permitting it, if it chooses, to retain a larger proportion of its profits than a larger business. In the interests of retaining earnings for the expansion of the business it of course becomes desirable to incorporate when the proprietors' taxable income is taxed at a rate exceeding the applicable corporation rate.[74]

73 The upper limit for the application of the low corporation tax rate was raised from $20 thousand to $25 thousand in December 1957.

74 There are provisions in the Income Tax Act—exceedingly complicated provisions—designed to prevent individuals from accumulating income in the form of undistributed earnings of corporations (usually small private corporations) as a means of avoiding taxes. We shall not go into these. They became necessary with the evolution of the tax system as the rates of individual income tax rose and as the corporation came to be considered as an entity separate from its shareholders. See J. Richards Petrie, *The Taxation of Corporate Income in Canada*, Toronto, 1952, pp. 53-76.

An increase in the tax rate has the effect of reducing the expected return on capital invested. At least this is the immediate effect; it is attenuated to the extent that shifting of the tax can be anticipated. While a tax increase may in fact be shifted, it would seem that the circumstances would be comparatively rare in which entrepreneurs could anticipate early shifting. Consequently, to the extent that a fall in the expected rate of return on capital would be decisive in investment decisions an increase in tax rates would of themselves discourage the undertaking of some investment projects.

There are however several factors which tend to offset this consideration. In the first place, a fall in the expected rate of return on capital may not be decisive in investment decisions within the range implied by the tax change. There are factors such as the desire of management to operate a larger if not more profitable organization and the related desire to maintain existing shares of the markets for products which influence investment decisions. We shall not consider these at this point however as they are not, strictly speaking, tax regulators. Other features of the tax laws, on the other hand, do tend to offset the effect of an increase in tax rates on the yield of invested capital.

The provisions of the tax laws permitting the writing off of losses against current income serve in some measure to offset the effects of an increase in corporation tax rates on the anticipated return on capital. Under Canadian tax law a corporation engaged in many activities may pool its losses in certain activities with its profits from others so that tax is levied only against its net profits. In addition, losses incurred in the five years preceding and in the year immediately following the current year may be deducted from the taxable income of the current year. To the extent that losses can be written off against taxable income, the reduction by the tax of the expected rate of return is counterbalanced.

> "To illustrate, a 40 percent corporate income tax will reduce a $150 return on a $1,000 investment to $90 after tax. But this is not, as it may seem, necessarily a reduction in the possible reward for risk taking from 15 percent to 9 percent of the amount risked. If the full loss can be deducted from taxable income in the event that the investment is unsuccessful, the net amount at risk is reduced to $600. The $90 return after taxes is still 15 percent of the net amount at risk."[75]

To be sure, this offsetting cannot be full if the rate of tax on incomes from which losses have been deducted is less than that on incomes from which no losses are deducted. A flat rate of tax on all incomes would permit maximum offsetting of this kind. In Canada we have only one step in the schedule of marginal tax rates applying to corporation income,

[75] Richard Goode, *The Corporation Income Tax*, *op. cit.*, p. 121.

though there are more in the individual tax rates which are applied to incomes of unincorporated business.

Of course it is also true that no benefit can be had from the loss-offsetting regulations if the income of a business is not large enough to absorb the losses. (The tax laws do not provide for the actual subsidizing of losses!) This feature of the legislation probably means that new and small enterprises perhaps benefit less from the loss-offsetting privileges than established diversified concerns. On the other hand the smaller companies are taxed at far lower rates than the larger companies.

A change in tax rates also may affect investment by business through the changes it induces in the conditions of supply of funds to the firm. We have mentioned that the immediate impact of the tax is to reduce the retained earnings of the corporation. We have mentioned that a further early effect of the tax is likely to be a reduction in the price of shares and as this may place the firm in the position of having to countenance a dilution of earnings if investment is financed by the issue of common shares, the supply price of share capital is raised. Inasmuch as we shall discuss in some detail below the effects of the tax on the relative costs of obtaining funds through various channels, we shall not here elaborate further on the effects of the tax on investment through its effects on the costs of finance.

Depreciation and depletion allowances together with retained profits make up gross retained earnings of business. The tax laws relating to depreciation and depletion allowances and changes in these laws, affect the volume of saving done by business, they affect the distribution of business investment expenditures as between classes of assets and as between industries. Indeed these laws have signifiant effects upon the allocation of resources among industries.

Under Canadian tax law a taxpayer is permitted to deduct from income part of the capital cost of property. Assets of the taxpayer are grouped into a comparatively small number of classes and depreciation against the assets in each class is charged according to a variant of the diminishing balance method. The tax regulations specify the maximum rate at which depreciation may be charged against assets in each class.[76] Until 1954 capital cost deductions were limited to the amount taken on the taxpayer's books of account; in 1954 however this provision of the regulations was withdrawn. Accordingly, a corporation, for example, may if it wishes, charge depreciation at a lower rate in the accounts prepared for the shareholders (and show profits at a higher rate) than that at which it is charged in the accounts filed with the income tax authorities.

No extended analysis is necessary to establish the fact that since the tax liability of a business varies inversely with the amount of deprecia-

[76] This plan involving the diminishing balance method of calculation was instituted in 1949.

tion it is allowed to charge, the allowable rates of depreciation are an important consideration (especially when income tax rates are high) in business decisions concerning investment expenditures. It is also manifest that these rates by influencing the investment undertaken also affect the saving through depreciation reserves that is subsequently performed by the business. Moreover, though here the point is more subtle, a calculation of the relative expensiveness of different kinds of capital assets must take into account not only the prices of the assets but also the rates of depreciation that will be allowed for tax purposes. Because of this, the tax regulations may influence the kinds of assets that are the object of investment expenditure.

That the tax regulations may have decided effects on business investment expenditures and saving through depreciation allowances was illustrated on two different occasions during the post-war years. There was first the accelerated depreciation regulation introduced in 1944. Later the opposite effect was induced by the deferred depreciation regulation introduced in 1951 as part of the programme for controlling the inflation sparked by the Korean War. We have referred to both of these changes in the regulations earlier in Chapter 4 and will not dwell upon them here.

In Chapter 4 we made particular reference to the discriminatory character of the plans for accelerated and deferred depreciation. Another example of special depreciation regulations which favour particular businesses are the special depreciation provisions pertaining in certain circumstances to designated classes of assets acquired by businesses engaged on defence contracts. These discriminatory features of the tax legislation are of a temporary kind, for the most part they may be expected to be used intermittently. However there are other rather more permanent features of the tax legislation which discriminate as between different industries. Examples are the special provisions relating to mining, oil and gas companies.

Taxpayers who develop or operate mines are permitted to make certain deductions from income of a kind not allowed to other corporations. These include expenditures for prospecting, exploration and development, pre-production expenditures and depletion allowances. Expenditures for prospecting, exploration and development incurred in the search for minerals may be written off up to an amount equal to the company's income for the year. Pre-production expenditures of a kind may be written off in any subsequent years to a maximum extent of 25 percent of the total. Depletion allowed is in most cases equal to one-third of the aggregate profits (less losses) of the company that can be attributed to the production of the principal metal, profits to be calculated however so as to exclude deductions for prospecting and pre-production expenditures. In addition to these special allowances, a corporation need not include in its income

any income derived from the operation of a mine during the three-year period immediately following the beginning of commercial production.

Oil and gas companies, like mining companies, are permitted to deduct from income their drilling and exploration expenses. Similarly such companies are allowed to deduct depletion allowances from income in an amount equal to one-third of the aggregate profits (less losses) attributable to the production of oil and gas. For this purpose however profits exclude deductions for drilling and exploration expenses and thus the company derives no benefit from the depletion allowance until its production income exceeds drilling and exploration expenses.[77]

These special provisions of the income tax law are expressly designed to stimulate the flow of funds into the oil, gas and mining industries. They stimulate investment in these industries and the provisions relating to depletion permit saving through depletion allowances within these industries. Arnold Harberger, in commenting on somewhat similar provisions in United States law has written:

> "More oil can indeed be obtained by tax concessions which operate as a gift from the rest of the economy to the oil explorers ... But such a gift is merely a hidden price paid for the extra oil. If the rest of the economy wants more oil, it should be willing to pay for it by way of a higher market price".[78]

Without commenting on the policy implication of this quotation we may note its reference to the operation of the tax provisions as regulators of the flows of funds as supplements to the price system.

That these tax provisions are important considerations may be attested by the representations made by the oil industry to this Commission on the effects of differences in the Canadian and United States concessions, especially the fact that Canadian producers unlike American producers obtain no benefit from the depletion provisions until production income exceeds exploration and drilling expenses.[79]

There are three industries that derive special concessions under the income tax legislation. We shall mention only the electric, gas and steam utilities. Under legislation introduced in 1952 companies whose main business is the distribution to or generation for distribution to, the public of electrical energy, gas or steam may deduct from the tax otherwise payable

[77] It will be understood that the above paragraphs on the special concessions to mining, oil and gas companies are not full or accurate renditions of the relevant provision of the Income Tax Act and Regulations. The interested reader should consult these documents for detail. In particular we have not mentioned special concessions to unincorporated tax payers who invest in, or expend money in the development of mines, gas and oil wells. Some aspects of the tax concessions to mining, oil and gas companies are discussed in J. Grant Glassco, *Certain Aspects of Taxation Relating to Investment in Canada by Non-Residents*, Royal Commission on Canada's Economic Prospects, Ottawa, 1956.

[78] Arnold C. Harberger, "The Taxation of Mineral Industries", *Federal Tax Policy for Economic Growth and Stability*, Joint Committee on the Economic Report, 84th Congress, 1st Session, 1955, Washington, pp. 445-6.

[79] See J. Grant Glassco, *Certain Aspects of Taxation Relating to Investment in Canada by Non-Residents*, *op. cit.*, Chapter 5.

an amount sufficient to reduce the liability to 43 percent of taxable income (or 45 percent if the old age security tax is included). This may or may not be a permanent concession depending upon whether corporation tax rates now at 47 percent (on income over $25,000) rise or fall. The concession now amounts to rather less than it did when it was adopted. In introducing this concession, the Minister of Finance in his budget speech repeated an earlier expression of "special concern over the effect of our present high corporate tax rate on certain public utility companies which are forced by the nature of their business and their franchises to raise large amounts of capital to finance expansion of services required to be performed for the public, and which because of public control of rates are allowed to earn only a modest return on their capital".[80] This is a further example of the use of tax regulations to maintain or stimulate the flow of funds (and resources) into a particular industry.

We have already remarked earlier in this chapter that in Canada depreciation allowances have become a larger proportion of gross retained earnings of corporations in the post-war period (see Table 6.2). In Table 6.25 we show this development in relation to figures over a longer period for the United States.

Table 6.25

THE RATIO OF RETAINED PROFITS TO GROSS RETAINED EARNINGS OF PRIVATE, NON-FINANCIAL CORPORATIONS, CANADA AND THE UNITED STATES, AVERAGES OF SELECTED YEARS

	Canada	United States
1922-29	n.a.	40.0
1938-40	n.a.	20.8
1946-48	54.7	84.7
1949-51	46.9	54.9
1952-54	35.9	52.4
1955-56	n.a.	35.2

SOURCES: Canada: National Transactions Accounts, see Part VI *infra*.
United States: 1922-29, Daniel H. Brill, "Financing of Capital Formation" in National Bureau of Economic Research, *Problems of Capital Formation*, Princeton, 1957, p. 158.
1938 retained earnings, *Productivity Prices and Incomes*, materials prepared for the Joint Economic Committee, 85th Congress, 1st Session, 1957, Table 21, p. 103; depreciation allowances, Raymond W. Goldsmith, *A Study of Saving*, Princeton, 1955, Vol. 1, Table 42, p. 957.
1939 and 1940, *Productivity Prices and Incomes*, *op. cit.*, Table 28, p. 110.
1946-1956, *Productivity Prices and Incomes*, *op. cit.*, Table 29, p. 114.

We have suggested several ways in which the income tax laws influence the volume of saving and investment by business. Undoubtedly the list of examples we have given is incomplete as the tax laws are marvellously complicated and subtle in their impact.[81] The tax laws in some respects operate to restrict corporate saving, in other ways they encourage it. These laws reduce the expected rate of return on investment in the short run at

[80] *House of Commons Debates*, Tuesday, April 8, 1952, p. 1253.
[81] The reader may wish to consult Richard Goode, *The Corporation Income Tax*, *op. cit.*, which is most helpful on this whole matter.

least, but other features of the legislation offset this in some degree. Certain it is, in the light of the post-war record, that high taxes on corporate and individual incomes are not inconsistent with very great expansion of both saving and investment by corporations.

c. The influence of tax laws on the forms in which business capital is raised.

We have remarked above on some of the effects of taxation on retained profits and depreciation reserves. These are the principal internal sources of funds for business. It should perhaps be noted that depreciation reserves and the surplus accounts showing the accumulation of retained profits do not represent liquid funds at the command of the corporation. The liquid resources of a business are usually represented by its working capital, the excess of current assets over current liabilities. It follows that a firm can finance expansion out of *accumulated* retained profits and depreciation reserves only to the extent that it is prepared to reduce its working capital. Financing through retained profits and depreciation allowances means then, for the most part, the use of all or part of *current* earnings that are over and above current operating costs and tax liabilities for the acquisition of assets or the reduction of liabilities.

In this subsection we shall concentrate on the effects of taxation on the preferences for "internal financing" as compared with "external financing" and on the forms in which corporations[82] will seek to raise funds externally.

It should first be noted that by the 1955 amendments to the Canadian Income Tax Act, a taxpayer is now allowed to deduct from income for tax purposes certain of the expenses involved in borrowing money or in issuing or selling shares of his capital stock. These expenses do not include, however, commissions or bonuses payable to a person to whom the securities are issued or sold nor that are in payment of services rendered by a salesman, agent or dealer in securities in connection with the issue of the securities. Thus by no means all of the expenses of issuing securities are deductible. For companies which make private placements of their issues virtually all the issuing expenses will be deductible. The deductible expenses of companies making public issues including the costs of prospectuses and legal fees are ordinarily a much higher proportion of the capital raised than are the deductible expenses of private placements. If one includes non-deductible commissions and fees with the total expenses of a public issue then normally the deductible expenses of a public issue are a very much smaller proportion of the total expenses of issue than is the case with privately placed issues. This legislation might be said to add to the advantages of making a private issue rather than a public

[82] Some of the considerations to be adduced apply also to unincorporated business, though the variety of instruments through which to elicit external funds is more limited in this case.

issue of securities; or conversely, smaller companies whose issues are normally private in any case, find their costs of external financing reduced somewhat by this legislation.

Undoubtedly the most important feature of the income tax legislation affecting the forms in which funds are raised by corporations in the capital markets is the provision which allows corporations to deduct interest on debts as an expense though not allowing dividends paid to be so deducted. Even the dividends on preferred stock are not deductible. Thus if the corporation tax rate is 50 percent for example, the cost of funds raised through a bond issue will be one-half of the cost of funds raised through an issue of preferred stock if the annual interest is the same percentage of the amount raised as the annual dividend.[83]

While there are many variations in the precise terms of preferred stock it follows from the above that in general a corporation raising money through preferred stock assumes all or much of the rigidity implied by the commitments as would be assumed with a bond issue without enjoying comparable tax advantages. It is true of course that a bond contract implies a commitment to redeem at a certain date while a preferred stock entails no such commitment. We shall show below that in certain particular cases the privilege of redeeming preferred stock may be exercised with advantage to the stockholder and that in such cases preferred stock may be regarded as an advantageous method of raising funds for the corporation. Special cases apart however, the income tax provisions have served to reduce the attractiveness of preferred stock as a method of raising funds for corporations. This remains true whether the tax is shifted or not.

The fact that the tax laws permit deduction of interest but not deduction of dividends in computing taxable income also favours debt financing as compared with equity financing. Perhaps the matter can be put most succinctly by remarking that with a 50 percent tax on corporation incomes a corporation must earn $2 before taxes in order to pay dividends of $1 but need only earn $1 before taxes in order to pay interest of $1.

If an increase in the tax is not shifted, that is if earnings before taxes do not rise, and if the price of common shares on the market falls, then the financing of an expansion by the corporation will involve a reduction of the earnings per common share or, as it is sometimes expressed, a dilution of earnings. If, in these circumstances, the financing of the expansion

[83] This statement is correct whether one considers the "gross cost of funds" or the "net cost of funds". Thus if the amount of funds raised is F and the annual charge either as interest or dividends is C and GB and GP are respectively the gross costs of borrowed funds and funds raised through a preferred stock issue,

$$GB = C/F \text{ and } GP = C/.5F \text{ so that } GB = .5\ GP.$$

Similarly, if NB and NP are respectively the net costs of borrowed funds and funds raised through a preferred stock issue,

$$NB = .5C/F \text{ and } NP = C/F \text{ so that again } NB = .5\ NP.$$

These matters are discussed at some length in Dan Throop Smith, *Effects of Taxation, Corporate Financial Policy, op. cit.*, Chapter 1.

is done by issuing bonds no dilution results. The dilution is an indicator of the extra cost of external equity capital. If an increase in the tax is shifted, that is, if earnings before taxes rise in the same proportion as the tax rate and if share prices return to their pre-tax values then an expansion through the issue of shares does not involve a dilution of earnings, but on the other hand, in the same circumstances, if the expansion is financed through bonds, the leverage effect of the increase in the debt to equity ratio accompanying the increase in earnings will result in higher earnings per share than would have pertained if the financing had been done through the issue of equities. Thus, the increase of the tax creates a bias against share financing in favour of bond financing, whether the tax is shifted or not. Insofar as there are limits (different for firms in different industries) to the extent to which firms and investors are prepared to contemplate increases in the debt-equity or leverage ratio, the increase in the tax tends to favour retained earnings as a method of financing expansions.

These relationships are complicated; it may be helpful therefore to illustrate them with the aid of a simple diagram and a particular example.[84] We shall deliberately simplify the example and we do not wish to be interpreted as arguing that matters work out so precisely and extremely as they will be assumed to do in the example. We use the example for expository purposes in the belief that it illustrates the principles involved.

Consider a corporation which has no bonds or preferred stock in its capital structure and against which no income taxes are imposed. Suppose that this corporation has common shares outstanding equal to OS_0 (see Chart 6.2 on p. 299) and that its gross earnings (profits) are OY_0 so that earnings per share are $e_0 = E_0S_0/OS_0$.

Now suppose that the firm is contemplating expansion, and that it intends to acquire earning assets with the proceeds of a doubling of the stock issue on the basis of current market prices for the stock. Let us also suppose that the gross earnings of the company are expected to double (to OY_1) as a consequence of the expansion. The expectation therefore is that earnings per share would remain $e_0 = BS_1/OS_1 = E_0S_0/OS_0$.

As an alternative to financing the expansion through the issue of stock, suppose that the same amount of money as could be raised by doubling the stock issue at present prices could be raised by an issue of bonds, that would involve annual interest costs (to keep the diagram relatively simple) of Y_0Y_1. By assumption then, the expansion through the bond issue would result in precisely the same earnings per share, e_0, as if the expansion were financed through a stock issue. We shall also consider financing the

84 The example is based on one used in the paper by Merton H. Miller and John P. Shelton, "Effects of a Shifted Corporation Income Tax on Capital Structure", *National Tax Journal*, Vol. VIII, 1955, pp. 252-59, though we have used a different diagram and have corrected what appears to be an error in their analysis.

expansion through a preferred stock issue on which the annual dividends amount to Y_0Y_1.[85]

Now suppose that a corporation income tax of 50 percent is imposed. Immediately the pre-expansion net earnings of the business are reduced by E_0E_1, the amount of tax, and the earnings per share become $e_1 = E_1S_0/OS_0$.

Now if the tax is not shifted (i.e., gross expected earnings after expansion are OY_1) and if the price of common shares falls by the same proportion as expected income after taxes, then in order to raise the same amount of money the shares outstanding will have to be trebled rather than doubled. Consequently if the expectations are realized, the corporation will, after expansion, make gross earnings of OY_1, pay taxes of Y_0Y_1, and make net earnings per share of $e_2 = CS_2/OS_2 = E_2S_0/OS_0$. The dilution of earnings would amount to one-third, represented in the diagram by E_1E_2/OS_0.[86]

If however, with the unshifted tax, the expansion were financed by bonds, shares outstanding would remain at OS_0, gross income would be OY_1 out of which bond interest of Y_0Y_1 would be paid, and taxes of E_0E_1, leaving net earnings at $e_1 = E_1S_0/OS_0$.[87] No dilution of earnings would be involved and earnings per share would be greater than under the stock financing alternative by 50 percent.

If the financing is done through preferred stock, then, by assumption, dividends of Y_1Y_0 are paid. But these cannot be charged against gross earnings in computing tax so that a tax of Y_0Y_1 ($= \frac{1}{2}OY_1$) would also have to be paid and net earnings after dividends and taxes would be zero. Earnings per share would be reduced to zero. Financing through a preferred stock issue is greatly inferior (even under our assumptions which are unrealistically biased in favour of preferred stock) both to financing through the issue of common stock and through the issue of bonds.

Now suppose that the tax is shifted, that is that pre-expansion gross earnings and post-expansion expected gross earnings each double. In that event pre-expansion earnings after taxes are E_0S_0 and per share are $e_0 = E_0S_0/OS_0$.

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85 The reader will recognize that a certain "normalizing" of the example has been done here. In practice one would suppose a corporation might be unwilling to finance an expansion by a bond issue if the consequent increase in gross earnings would not exceed the interest payments on the bonds. Moreover, one would suppose that the dividend yield on preferred stock would normally be rather higher than the yield on the bonds of the same corporation.

86 Expected earnings after tax before expansion were $e_1 = \dfrac{E_1S_0}{OS_0}$;

after expansion they are $e_2 = CS_2/OS_2 = \dfrac{2(E_1S_0)}{3(OS_0)} = 2/3\ e_1$.

87 This assumes that the fall in the price of shares is not accompanied by an increase in the price of bonds, that is, that the substitution of corporation bonds for shares in investors' portfolios is so marginal as not to affect corporation bond prices. This is perhaps an extreme assumption. To the extent that bond prices rise, interest costs on the bond issue would be lower, and earnings per share would exceed e_1.

If after shifting, the price of shares is at its pre-tax level then the contemplated expansion could be financed by a doubling of the number of shares outstanding. Expected gross income would now be OY_2 ($= 2OY_1$), and after paying taxes of Y_2Y_1, earnings per share would be $e_0 = BS_1/OS_1 = E_0S_0/OS_0$.

If, after shifting, the expansion were financed through a bond issue, then after deducting from gross earnings of OY_2 interest of Y_0Y_1, and taxes of one-half of the remainder, net earnings after taxes would be E_3S_0 leaving earnings per share at $e_3 = E_3S_0/OS_0$. The increased leverage in the capital structure, the increase in the ratio of debt to equity, coupled with the increase in earnings would, even after shifting the tax, leave earnings per share 50 percent higher than they would have been had the expansion been financed by the issue of shares, which incidentally is the same relative advantage of bond financing over share financing as pertained in the case in which the tax was not shifted.[88]

If after shifting, the expansion were financed through the issue of preferred stock then, after deducting taxes of Y_2Y_1 (one-half of *all* gross earnings) and dividends of Y_1Y_0 on the preferred stock, net earnings on the common stock would amount to E_0S_0. Earnings per share of common stock would be $e_0 = E_0S_0/OS_0$, the same as if financing were done through the issue of common shares.[89]

Thus, this exercise or example illustrates the proposition that whether an increase in corporation taxes is shifted or not, the increase in taxes creates a bias in favour of bond or debt financing and against share financing in the external financing of corporate expansion. It illustrates the further proposition that the shifting of the tax eliminates (or reduces) the dilution of earnings consequent upon expansion through the issue of common shares and eliminates (or reduces) the superiority of common stock issues over preferred stock issues as a means of financing the expansion.

Let us take a broad view of the record with respect to external versus internal financing and bond financing versus stock financing over the last three decades. We have to use data for the United States as none of comparable kind are available for Canada. These data are shown in Table 6.26. The first trend to be noted is the very much lower ratio of the proceeds of new security issues (after allowances for retirements) to gross corporate saving since the 1920's. There have been changes in this ratio over the post-war period, it being substantially higher in the second half of the period than in the first half but we shall not explore these changes here. It will be recalled that within the category of gross retained earnings, depreciation

88 On this we differ from the paper by Miller and Shelton cited earlier. These authors contend that the relative advantage, measured by earnings per share, of bond financing over common stock financing is smaller when the tax is shifted than when it is not. See in particular their footnote 8, p. 256.

89 It is true that leverage is increased by an increase in the ratio of preferred to common stock in the company's capital structure, but in this example the increase in earnings is not sufficient for it to become effective.

allowances are now apparently somewhat more important than in the 1920's and have become increasingly more important relatively to retained profits in the post-war years.

The data on gross proceeds of new issues is not as satisfactory as one might wish. It would be desirable to show information on retirements of securities of each class as well. The gross proceeds from bond issues have been much larger than the gross proceeds from stock issues in the period covered by the data, but in the post-war years the ratio of bond proceeds to stock proceeds in these gross terms has been very much higher than in the 1920's. As among stocks, we note that while in the 1920's gross proceeds from the issue of preferred stocks was of the order of 38 percent of the gross proceeds from all stock issues, in the post-war period this ratio was of the order of 36 percent, and while just after the end of the war it was of the order of 50 percent, it fell steadily throughout the period and averaged about 30 percent for the years 1955 to 1956.

Earnings per share on industrial and public utility common stocks are very much higher than they were in 1938 and earnings per share on industrial stocks in 1955 to 1956 were very much higher than they had been in 1929 though the same could not be said with respect to utility stocks.

All of this is, in a general way, consistent with what we might expect from our discussion of the effects of taxes on the capital structure of corporations. But from the information in Table 6.26 it is quite apparent that taxes are not the only factors affecting saving and the capital structure of corporations. Thus for example, a comparison of bond yields with earnings/price ratios of common stocks reveals that bond financing has become much cheaper relatively to common stock financing since the 1920's. This is for many reasons. It is partly because of the monetary policy that has been followed, it is partly because of the amassing of savings in institutions which prefer to invest in bonds much more heavily than in stocks. We must move on now[90] to discuss some of these other regulators of the flows of funds. We shall take up prices and yields next.

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[90] We have not exhausted the list of tax effects on the capital structure of businesses. The more technical features of the legislation sometimes have very considerable effects. We may in this connection mention the provision whereby in transactions in which a business sells property to an investor and leases it back, the transaction is regarded as an instalment purchase by the business if the contract includes an option to repurchase. In the case of an option to repurchase, the business cannot charge rent as a business expense, but can charge depreciation on the building. This very much reduces the attractiveness of such transactions to the business where the option to repurchase is regarded as important. (See J. A. Rhind, "Leasebacks may aid your firm but take a careful look first" in *The Financial Post*, August 18, 1956, pp. 34 and 35.) Mention might also be made of the provisions whereby the granting of stock rights to *all* shareholders of a corporation is not deemed to be a grant of a taxable benefit, whereas the granting of such rights to a select class of shareholders is considered as a grant of a taxable benefit. Finally we may mention the provision whereby a company may elect to pay an extra tax of 15 percent on retained earnings up to an amount equivalent to the earnings it has distributed and so establish a fund of "tax-paid undistributed income". Tax-paid undistributed income may be made available to shareholders in one of several ways without imposing additional tax burden on the shareholders. The undistributed income cannot be distributed to shareholders in the form of a tax-free cash dividend however. The most common method of distributing tax-paid undistributed income is by means of a stock dividend usually in preferred stock, to the shareholders, which may subsequently be redeemed without additional penalty. This legislation may have the effect of encouraging the use of preferred shares by small companies; one of its main objects however is to provide a means of avoiding the consequence of an intolerable build-up of tax liability on the part of shareholders in small corporations whose shares do not have a ready market.

Table 6.26

SAVINGS, NEW ISSUES AND YIELDS RELATING TO CORPORATIONS IN THE UNITED STATES, SELECTED YEARS 1922-56

Years	Ratio of proceeds of security issues to gross retained earnings[a]	Percentage distribution of gross proceeds of new issues[b]							Bond yields[c]		Preferred stocks dividend yields[d]	Common Stocks			
		Total	Bonds			Stocks			Industrials	Public utilities		Earnings/price ratio[c]		Earnings per share[d]	
			Total	Publicly offered	Privately placed	Total	Preferred	Common				Industrials	Public utilities	Industrials	Public utilities
1922-29	72.9%	100.0	59.6	—	—	40.4	15.5	24.9	5.56%	5.33%	—	8.33%	7.90%	—	—
1938-40	17.2	100.0	91.6	60.8	30.8	8.4	5.3	3.1	3.30	3.53	4.22%	6.30	6.47	2.06%	1.68%
1946-48	34.3	100.0	77.3	43.1	34.2	22.7	11.6	11.1	2.71	2.84	3.82	11.14	7.29	5.29	2.19
1949-51	34.0	100.0	76.9	35.5	41.4	23.1	9.4	13.7	2.77	2.94	3.98	13.03	8.07	7.47	2.47
1952-54	46.5	100.0	79.3	41.2	38.1	20.7	6.7	14.0	3.13	3.27	4.14	9.46	7.12	7.76	2.78
1955-56	40.5	100.0	72.8	39.4	33.4	27.2	6.0	21.2	3.34	3.38	4.13	7.48	6.67	10.43	3.28

a For sources of figures on gross retained earnings, see sources cited in Table 6.25. Proceeds of new security issues are here defined as gross proceeds less retirements of securities. The figures are taken from the following sources: 1922-29, *Commercial and Financial Chronicle*, and data taken from Board of Governors of Federal Reserve System, *Banking and Monetary Statistics* (Washington) 1943, Table 137, p. 487; 1938-56, Securities and Exchange Commission data as reported in *Federal Reserve Bulletin*, various issues e.g., July 1953, p. 756 and October 1957, p. 1164.

b Same sources as given for proceeds of security issues in previous note.

c *Productivity Prices and Incomes*, materials prepared for the Joint Economic Committee, 85th Congress, 1st Session, 1957, Table 47, p. 140.

d *Business Statistics, 1957, A Supplement to the Survey of Current Business*, Office of Business Economics, U.S. Dept. of Commerce, p. 100.

2. *Prices*

In Chapter 2 we announced our intention to try to appraise the working of the price system in the capital market. Further to this end, we shall, in this subsection, discuss the sensitivity of decision-makers in business to changes in relative prices of goods and of securities. However, we shall have to exercise severe restraint and confine our attention to a few aspects of the larger questions, otherwise all phases of the behavior of business firms will crowd in upon our pages and we shall never get beyond the present chapter. In particular we shall restrict our discussion to selected aspects of a) the relation of business saving and investment to the price system and b) the influence of security prices on the choice between debt and equity financing.

a. The relation of business saving and its use to the price system

In this section we shall concentrate on the affairs of private non-financial corporations. In the post-war years 1946 to 1956 saving by this segment of business in Canada was over three and one-half times larger than its net demands on other sectors for funds. This saving, which includes depreciation allowances and retained profits for the most part, has provided a very large portion of the funds required for the expansion of business. In a very real sense these funds have been raised in the markets for goods and services and not directly in the capital markets. Does this mean that the control of the price system over the allocation of funds and of resources has been less effective than it might have been if non-financial corporations had been forced to raise a significantly larger proportion of their needed funds directly in the capital markets? This is the main question to which we shall address ourselves in this section.

Let us begin by asking a very fundamental question: Why do corporations establish depreciation reserves? Why for example when a corporation wishes to spend on new capital equipment does it not borrow for the purpose and then establish a sinking fund against the bonds? The bonds can be dated to mature at the end of the expected life of the assets. In this way the corporation will be free to borrow again to replace the assets. Now this is not a nonsensical financing scheme; it could and does have some application even in the field of corporation finance. It is used also for example in municipal finance, though more often than not the life of the municipal bonds is considerably less than the expected life of the assets they were issued to finance. There are however very strong reasons why this is not the universal method of financing the acquisition of real assets by corporations. To take up these reasons in increasing order of importance mention may be made first of the fact that such a method of finance would reduce the flexibility of the corporation in many ways. For example, the corporation following this method of finance would be inclined to acquire new assets only as its outstanding bonds matured, inasmuch as the market

views with disfavour too frequent applications for funds from the same corporation. The growth in the corporation's assets would tend to be jerky and many promising opportunities for particular corporations might have to be missed.

It will be noted that this method of finance, if applied universally, provides for no expansion of the equity in the corporation. To put this matter another way, under this method of finance, bondholders would be required to assume all the risks involved in expanding the assets of a corporation. We may be sure that potential bondholders would extort a handsome reward for this service! Indeed, financing by this method would prove far too costly (except in special situations) and consequently, acquisition of new assets would have to be financed partly by equity, in the form perhaps, but not necessarily, of additional shares. Rather rigid leverage ratios are imposed on corporations by the conventions of investors and of corporation executives. These ratios — ratios of debt to equity — vary from one type of company to another, but they represent distillations of the feelings on both sides of the capital market as to the risks involved in various enterprises and the way in which they should be shared as between bondholders and shareholders.

Now, granted that expansion will be financed partly out of equity funds and partly from borrowed money, what would be the situation if no depreciation were charged, and all earnings were distributed? Quite clearly the new equity in the business would be dissipated by the time the assets had passed their useful life — even if the firm had been enormously profitable. But only in special circumstances are corporations or businesses of any kind formed for the purpose of acquiring specific assets, exploiting them, and then passing out of existence. The partnership and proprietorship have been found to be ineffective for many purposes because their lives were limited by the lifetime of their important assets — people. The corporation whose lifetime was arbitrarily limited by the lifetime of some of its assets would also be found ineffective. Indeed, if the lives of corporations had been thus arbitrarily limited, it would not have been possible for capital to have been amassed to effect the great gains in productivity that have been effected with the corporate form of enterprise operating in and through the price system.

It is the promise of indefinite life of a *profitable* corporation that makes it so eminently attractive a form of enterprise for many undertakings and for many investors. Depreciation allowances are a means of reserving earnings for the preservation of the assets in the interests of guaranteeing, so far as possible, the opportunity to make future earnings for present and future stockholders.[91]

91 As presented in the text, the argument is applied to corporate enterprises. It is perfectly true of course that non-corporate enterprises establish depreciation reserves. The purpose is the same however, that of perpetuating the life of the enterprise beyond the life of the assets being depreciated. An established business can be sold whether it is a corporate form of enterprise or not, and not all unincorporated businesses have limited time horizons. The practice of charging depreciation, in one form or another is essentially a practice of going concerns with time horizons extending beyond the expected life of present real assets.

The distinction between retained profits and depreciation allowances is in many respects blurred. The formal distinctions have very practical importance, they affect taxes and they affect a company's position in wage bargaining for example. But here we are interested in functional distinctions not formal distinctions, and that is the reason why, in the above, we made no reference to the controversial matter of whether depreciation "should" be calculated on a replacement cost or original cost basis, on a straight line or diminishing balance basis and so forth. If formal distinctions were not important these questions of calculating formulae would not be so important because the main issue would be the degree of conservatism to display in providing cushions within the business against uncertainties of the future, and whether these cushions were called depreciation reserves, or reserves for contingencies, or surplus would not matter much.

Retained profits are, among other things, a cushion against some of the uncertainties of the business.[92] Let us elaborate on this theme briefly. In the first place, they provide an addition to depreciation allowances formally so called, which, having been calculated according to some formulae imposed by tax law or other conventions may not be deemed adequate to ensure capital recovery in real terms in the face of rising asset prices for example. Secondly, retained profits are a cushion giving added flexibility to the firm. They permit more ready exploitation of unexpected opportunities without the delays and uncertainties attendant upon issuing new securities and indeed issuing them at a time when new securities may be especially costly to float. They permit consolidation of appeals to the market and, to some extent a choice of favourable times for making appeals. By and large, firms are expected to come to the market only periodically, too frequent appeals to the market spoil the market for its issues. Finally, we refer to the fact that among the uncertainties of business are the uncertainties of competition, and retained profits may be used in many ways to reduce these uncertainties. Thus they may be used to acquire the assets of competitors, to destroy competitors, to promote integration, vertical or horizontal and so forth. (It needs to be added that funds acquired externally through capital market issues may also be used for this purpose.)

Retained profits are used for other purposes than cushioning against uncertainty. We cannot undertake here to list them all. We would note in particular however, that retained profits may improve the market for a company's securities. This is especially true with respect to bonds; notes and preferred stock for retained profits provide additional "coverage" for the lender. With respect to common stock issues this assertion is less generally defensible. If through a policy of retaining profits and of restraining dividend increases the price of a company's shares does not rise *pari passu* with the prices of real assets, there exists the likelihood that unless the prospective earnings from expansion based on a share issue exceed the

92 Some uncertainties can be met only by having *liquid* resources on hand. Recalling the remarks made at the beginning of section C.1.c. above, we note that retained profit must be invested in liquid assets working capital to meet these uncertainties.

rate of earnings on existing assets, dilution of earnings or falling earnings per share will result. This will not eventuate however if dividend policy and other considerations have been such as to keep the prices of company shares moving roughly in accord with the prices of assets. We have already noted earlier that owing to tax considerations many shareholders prefer their companies to exercise restraint in channelling current earnings into dividends.

Retained profits are like depreciation allowances in that both relate to past commitments of the firm and provide flexibility and resources for dealing with future contingencies. Depreciation allowances are related to past capital investment. Retained profits, in general, arise as the fruits of past decisions. More specifically they are larger or smaller depending upon the pay-out ratio to which the firm has earlier committed itself,[93] as well as many other traditions of its practice, such as allowing credit sales, its inventory practices and so forth.

Retained profits have certain advantages to the firm, and on any calculation of costs of funds to the firm these must be taken into account. One would suppose that ordinarily costs of funds in the form of retained profits must be lower than costs of external funds. There are differentials among the costs of external funds too. Of course, when there are differentials among the costs of funds we cannot say we have *prima facie* evidence of misallocation of resources if financing is done through the cheapest channels! But this brings us to our main question.

Does the circumvention of the capital market involved in financing business expenditures through retained profits and depreciation allowances lead to a presumption of misallocation of resources? Let us be clear as to the import of the question. We are interested in allocating resources in a way which will secure their greatest productivity. If there are no changes in productivity taking place in any firm or industry then the only possibilities of increasing the national product lie in winning the marginal gains to be had from shifting resources among firms or industries until just the ideal distribution is achieved. On the other hand if, as is the typical case in a growing economy, productivity increases are taking place in firms and industries then an important consideration is to avoid choking off resources from the producers bent on introducing new methods, new techniques of organization and other productivity-increasing devices. For these productivity gains may be much larger than those to be squeezed out in marginal adjustments in the allocation of resources.

One is inclined to think of the problem in terms of alternative allocations of given sums (business saving) to the financing of business enter-

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93 One of the conventions of corporate practice is a convention against frequent and wide changes in the dividend pay-out ratio. See for example, John Lintner, "Distribution of Incomes of Corporations among Dividends, Retained Earnings and Taxes", *American Economic Review, Papers and Proceedings*, Vol. XLVI, May 1956, pp. 97-113, and Paul G. Darling, "The Influence of Expectations and Liquidity on Dividend Policy", *Journal of Political Economy*, Vol. LXV, 1957, pp. 209-24.

prise. But it may be contended that if some part of business income were paid out as dividends rather than saved within the business, a portion of these dividends would not flow back into the capital market, directly to finance some project there. Certainly it is true that some proportion of earnings paid out as dividends will flow to the government through income tax and this proportion may well be very large inasmuch as a high percentage of corporation common stock is held by individuals and indeed by individuals with incomes subject to the highest rates of tax. While some of the remainder may flow to the goods market or to government securities, it seems likely that the bulk of it will be reinvested in business enterprise given the information we have about the holders of common stocks. Perhaps a more fruitful way of discussing the problem is to consider probable differences in the degrees to which particular firms will obtain the funds they seek, under the alternatives of financing in the goods market and in the capital market, noting without further comment the fact that dividend payments may be siphoned partly to the government.

In considering the question, with the interpretations we have suggested, we shall have to think of the working of the price system at large, and not merely in the capital market. It is unfortunate that the theoretical argument defending the price system as an efficient regulatory mechanism becomes least satisfying when it treats of the regulation of investment decisions. Investment decisions characteristically involve large, indivisible blocks of real assets and always they require the assessment of distant and uncertain prospects. Indivisibilities and uncertainty comprise two of the principal conditions over which the theoretical justification of the price system falters.[94] Be this as it may, our present limited understanding of these matters would lead us to presume that resources are not being grossly misallocated if the test of profitability is applied in the economy so that firms which can show profits obtain sanction for survival and the right to renewed claims on resources.[95]

The question at issue is: does the use of business saving by the savers themselves necessarily increase the possibility of misallocation of resources? We have considered its import, let us now develop our answer to it. As was forecast in Chapter 2 our answer is in the negative.

With respect to new or small enterprises the answer to the question seems clear and uncontroversial; let us therefore consider this aspect of the matter first. Without relying on their own saving very few new or small enterprises could grow. Yet, these enterprises are often an important source of new ideas and methods and their promotion is in many cases very much worth encouraging in the interests of achieving increases in productivity for the economy. To discourage retention of earnings by

94 We must not allow ourselves to travel up this fascinating road here. Readers may wish to consult for example: T. C. Koopmans, *Three Essays on The State of Economic Science*, (New York), 1957, especially parts of essays I and II and J. de V. Graaff, *Theoretical Welfare Economies*, (Cambridge, Eng.) 1957, especially Chapter VI, VII and VIII.

95 We shall refer to the matter of monopoly below.

these firms would surely be to produce a misallocation of resources. Moreover, these firms cannot save if they do not make profits and therefore the fact that they are able to save is evidence that they are meeting the only rough test we are able to apply as to whether they should survive and maintain their claim on resources.[96]

Perhaps the most frequent argument against the practice of firms financing their activity from their own saving is that projects receive less careful and more limited scrutiny when they are examined only by a firm's own officers than when they are examined by potential buyers of their securities. No one would wish to argue that there may not have been cases in which this argument was substantially correct. But is it likely to be true generally?

In very large enterprises engaged in multifarious activities either within one corporate organization or a hierarchy of companies, projects, especially the larger projects, can and will be compared with other projects being contemplated within the same organization. Even somewhat smaller organizations may contemplate expanding their activities in one of several possible directions and thus projects are compared with others. In addition officers of companies contemplating projects at all akin to undertakings being made by other organizations will almost certainly find out what anyone can about the profitability of these other undertakings. It is easy to exaggerate the narrowness of intra-organization appraisal of contemplated expenditures.

However, it may be argued that intra-organization appraisal of contemplated expenditures would be made whether internal funds or external funds were to be employed and that appraisal by potential security buyers is an additional appraisal. It cannot be denied that, if a company appeals to the market for funds, the purposes of the contemplated expenditure are examined by more persons than would otherwise be the case. One can emphasize, however, how very limited is the group of investors and company officials in the capital market (especially but not exclusively in Canada) and how large is the extent to which their points of view are likely to be similar. We must not enter into this sociological aspect of the matter very far here, but we do draw attention to the fact that there is a rather close network of interlocking directorates in the business and financial world. Officers of one company are frequently directors of several others. Insurance companies, banks and security houses are represented on the boards of directors of many companies, (especially those likely to make large appeals to the capital market) and conversely. Moreover, as we saw in

96 It may be argued that such firms *have* to rely on saving rather than external funds because the capital market makes it so very expensive for them to borrow or issue shares. This expensiveness may arise from the preferences of investors for less risky investments and it may arise from the high costs of public issues of securities in small amounts. Such an argument must be recognized however as exposing a (perhaps unfortunate) bias of the capital market, rather than an argument against retained earnings.

Chapter 5, the number of non-institutional holders of corporate securities, bonds or shares is exceedingly small.

Finally, it may be noted that it is not the practice for companies making public issues to shop around seeking outside appraisals of their projects from a variety of underwriters (in the hope of obtaining the best underwriting deal). Rather, it is customary for companies which issue securities from time to time to maintain rather close connections with particular underwriting houses. Such a company will continue to bring its issues to the same underwriting firm and that firm only. Though such connections are broken from time to time they are likely to be broken only after considerable provocation. These attachments are obviously valuable to the underwriter and he will be loathe to offend a good client.

It may also be argued that internal appraisal of contemplated expenditures may be less thorough than outside appraisal. This too, may well be true in some cases. It is conceivable that management will "play its hunches" more readily if it can finance the project under consideration out of saving rather than by having to "go to the market". On the other hand this may often mean that risky but nevertheless productive ventures are more likely to be sanctioned if financed through retained earnings. With all due respect to the technical work done on investment projects by underwriting houses, and some of this work is astonishingly thorough, it would seem to stand to reason that in general the technical merits of projects must be best understood by the companies planning to carry them out. Individual underwriting houses cannot be expected to have expertise in all the devious branches of industry and trade represented by the securities offered to them. In a great many instances the underwriting group must base its judgment on other than technical merits of the project. Presumably, foremost among these other considerations will be the past record of the group that is applying for funds as entrepreneurs. The past earnings record, past successes in introducing new methods and practices — these must weigh very heavily in the decisions of the underwriting houses as to whether to accept an issue or not. As we said in Chapter 2, the choice of the underwriter may perhaps be best epitomized as a choice among men rather than a choice among projects. It is well known that in working out an underwriting deal it is usual to accept the issue in principle first and for the price to be worked out later. This does not mean that deals do not break down at the price setting stage; it does suggest though that judgment of the underwriter is first and foremost a judgment of the entrepreneurial group and secondly of the project. It should perhaps also be remembered that the range of projects coming to the attention of any particular underwriter at any moment may not be a wide one and indeed if he compares any particular applicant's project only with those others also under his surveillance at the time, the project may be subjected to a quite limited set of comparisons.

To summarize the argument to this point, we have contended that given present practices in the capital market some firms — new and small firms — have very limited alternatives to the financing of their expansion with retained earnings and that if these firms do not meet the test of profitability they cannot so expand. Since they meet the test of profitability it cannot be assumed that resources allocated to them are misallocated. We have further argued against the proposition that projects presented to the capital market for approval necessarily in practice get a test better calculated to prevent misallocation of resources than the test given by firms which decide to finance internally.

The decisive argument however in defence of firms financing their expansion with their own saving against the charge of possible misallocation of resources is, however, that the ultimate test of investment decisions is whether the funds invested have been used profitably. *This test must be passed by all firms whether they secure their funds from their own operations OR in the capital market.* It is indeed an *expost* test but it is the only final and conclusive one there is. But the test is continuously applied. Firms cannot long fail to meet it and survive. Unprofitable companies will not find it easy to raise funds in the capital market; unprofitable companies will not long be able to finance expansion from depreciation allowances. In short, profits are necessary to the obtaining of funds for expansion whether directly or indirectly; they are the reward for success and the licence to try again. In a growing, advancing economy in which some firms are leading and some lagging, the ultimate equilibrium of "normal" profits for all survivors is never attained. We have only a rough test as to whether resources have been allocated in the proper channels and that is the test whether firms can use their resources profitably. This test must be passed by all firms if they are to survive, irrespective of whether they draw their funds from their own saving or the saving of others.

There is one qualification which must be made to this argument. It is granted that the exercise of monopoly power may in a sense lead to the misallocation of resources. It must be conceded that self-finance of business may contribute to misallocation to the extent that individual monopolies are financed from their own saving. But this qualification needs itself to be qualified in two respects. In the first place, monopolies need not be and are not always financed from their own saving. Monopolies may also make successful appeals to the capital market. Secondly, monopolies may not in every relevant sense lead to the misallocation of resources. Indeed, the establishment of some guarantee of markets may be the means of sufficiently reducing the risk involved in bringing forth innovation to make the attempt worth while. This however, is a familiar argument in explanation of monopoly and we need not pursue it here.

So far we have argued as though firms either secured all their funds for expansion from their own operations or all of their funds for expansion

from external sources. In fact, of course, either of these extremes is rare. More typically, firms finance both from their own saving and from external sources, coming to the market for at least those marginal amounts of funds without which their major projects could not be undertaken at all. Having some saving as a cushion they are able to appeal to the market with a form of security and at a time more suited to their interests than might otherwise be the case. This leads us to the discussion of the influence of prices on new security issues by corporations.

b. The influence of security prices on the choice between debt and equity financing

In Chapter 2 we suggested that except when expectations are destabilizing factors in the market, the price system may be presumed to operate more effectively when borrowers are sentitive to changes in the relative costs of raising funds and suppliers are sensitive to changes in the relative yields of assets. In this subsection we wish to offer a few observations on the sensitivity of corporations to changes in the relative costs of raising funds.

The very phrase "costs of raising funds" involves technical problems. It would not be difficult to agree on a definition of the costs of debt financing, for the purposes of discussion, but there is much more room for debate on the question of a satisfactory concept of the costs of equity financing, particularly through the issue of common shares. When debt financing is accomplished through the issue of regular notes, mortgages, bonds or debentures, it would, in most cases be acceptable to think of the costs of financing as the issuing costs plus the annual interest charges. Both of these may be expressed as a percentage of the funds taken in by the corporation. A general indicator of the changes in the costs of debt financing may be taken as the yields on corporate debt issues. An inverted indicator of changes in the costs of bond financing is provided by an index of corporate bond prices.

No one concept of the cost of common stock financing is necessarily the most useful for all purposes.[97] In the present context in which we wish to compare the costs of bond financing with the costs of stock financing it seems helpful to think of the cost of common stock financing as that increment in earnings required to maintain the rate of earnings per share or, as it is sometimes expressed, to prevent dilution of earnings.[98] The ratio of earnings (after taxes) per share to the price of a share indicates this cost of common stock financing in percentage terms and we shall refer to this indicator. Unfortunately, the price of shares is not

97 For a much more detailed discussion of the concept of the cost of common stock financing the reader may wish to consult Dan Throop Smith, *Effects of Taxation, Corporate Financial Policy*, *op. cit.*, especially Chapter two.

98 This is obviously not the most helpful way to express the cost if we think only of new corporations. In these cases earnings-price ratios pertaining to corporations already in the industry would seem the most sensible indicators of this cost of common stock financing for a new entrant.

as good an inverted indicator of the cost of common stock financing as the price of bonds is of the cost of bond financing, but we shall have to resort to the price of shares as an indicator, in the absence of data on earnings-price ratios, in one or two of our references below.

We must recognize that there is a variety of security issues that partake of features of both stock and bond financing. We shall comment briefly on the costs of financing through each of the main classes of these "mixed" issues. There is first of all preferred stock. There are many types of preferred stock issues, but we cannot refer to each explicitly. In general, probably the best indicator of the cost of this type of financing is the ratio of the contractual dividend to the price per share, though this is more acceptable in the case of cumulative non-participating preferred stock than in the case say of non-cumulative participating preferred stock or convertible preferred stock. Often bonds and common stocks are issued together and sold to the public as units. This case presents no particular difficulty however as it is possible to think of the bonds and common stocks separately for purposes of considering the costs of finance this is a joint issue of bonds and stocks though here, the associated issue bonds or debentures with warrants attached which entitle the holders to purchase common stock in the company at specified times and prices in the future, the price usually rising with the passage of time. Again, this is a joint issue of bonds and stocks though here, the associated issue of stock is delayed and to a degree uncertain. Presumably one must rate the cost of the funds secured through the bond or debenture issue above the contractual interest on these securities, otherwise the issuing corporation would not have to offer the additional advantage of warrants to buyers in order to induce them to buy the bonds or debentures. It would take us too far afield to discuss the methods of valuing this additional cost. Finally, we may mention one other class of securities, convertible debentures which offer purchasers the privilege of converting the debentures into common stock at future dates and at specified rates. The conversion ratio, the number of shares per thousand dollar debenture, is usually set to decline over the life of the debenture. If the attaching of warrants to bonds and debentures is a device for issuing *both* bonds and stocks, with the amount of the stock issue uncertain, the use of convertible debentures is a device for issuing *either* bonds or stocks, with the ultimate amount of the issue of each uncertain. Again the cost of the funds secured through the debenture issue must be rated above the contractual interest costs to allow for the cost of extending the conversion privilege.

A satisfactory analysis of the sensitivity of corporations to changes in the relative costs of raising funds requires rather detailed data on the sources of funds in separate industries that can be matched against indicators of the relative costs of securing funds in those industries. If material of this kind has been worked up for Canadian industries, it has never been

made public. Even the published American data in this field leaves much to be desired. Accordingly, we shall have to be content with a somewhat cursory and unsatisfactory discussion of the subjects. (This is another aspect of our general problem which very much requires a substantial amount of basic research.)

We shall expect, of course, to find that other factors in addition to relative costs affect the choices of corporations as to the channels through which to seek funds. We have already referred to the influence of taxes, we shall refer to certain other influences presently. It is desirable to stress once again however, that it is not necessary for the effective working of the price system that an increase in the cost of bond financing relative to stock financing, for example, drive all corporations to the stock market for all their long-term external funds. It *is* necessary that an increased proportion of the funds be sought in the stock market so that costs of financing in that market will reflect the pressure in the bond market. Such marginal switches in financing are necessary if the price system is properly to effect the allocation of resources in conditions of full employment and if certain policies, such as conventional monetary policy, directed toward the adjustment of the over-all level of economic activity, are to be effective.

Even though it would be desirable to consider switches among all the major external sources of funds in response to changing cost ratios, we shall confine our attention to the sources of longer term funds and consider generally the movements in the ratio of bond financing to common stock financing in relation to changes in the ratio of indicators of costs of these two broad sources of long-term funds. Let us first make one observation concerning the secular drift of these two sets of ratios before considering their fluctuations over shorter periods.

In discussing the effects of taxation on corporate financial structure we noted that the very considerable rise of corporate income tax rates since the nineteen twenties is reflected in a greater preponderance of bond financing in the total of corporate financing through stocks and bonds. We noted in passing, commenting on data shown in Table 6.26, that the decrease in the costs of financing through bonds as compared with the costs of financing through common stocks was also consistent with this trend toward bond financing. Here we emphasize the change in the relative costs of financing. In Table 6.27 figures for the United States are shown which illustrate the sharp contrast between the twenties and the recent post-war decade in the relative costs of financing through bonds. The decline is least in the public utilities field where bond financing is proportionately heavier than in other industries, but even in this field the drop has been very substantial. The evidence seems incontrovertible that the rise in the relative importance of bond financing has been associated with a decline in its cost relative to the cost of stock financing. (There has also

been a decline in its absolute cost; bond yields in the post-war years have on the average been substantially below their values in the twenties.)

Turning now to shorter term changes in the ratio of bond to stock financing we first offer a very brief summary of an analysis of changes in bond financing over the so-called business cycle, made by W. Braddock Hickman.[99] His study concerns the United States and concentrates largely on data pertaining to the period before World War II. His conclusion (qualified in various respects) is:

> "In general, however, when the ratio of stock to bond prices turns downward during the contractive stages of the business cycle, corporations tend to shift their financing from the stock to the bond market; and conversely, when the ratio of stock to bond prices turns upward during expansion stages, corporations shift from the bond to the stock market".[100]

Table 6.27

RATIO OF BOND FINANCING TO BOND AND STOCK FINANCING AND RELATIVE COSTS OF BOND AND STOCK FINANCING, UNITED STATES

Years	Ratio of gross proceeds of bond issues to gross proceeds of bond and stock issues[a]	Bond yields divided by earnings-price ratios of common stock[b]		
		Industrials	Public utilities	Railroads
	%	%	%	%
1920-29.......	61	75	69	60
1946-56.......	77	28	42	23

a 1920-29: "Commercial and Financial Chronicle", data as recorded in Board of Governors of Federal Reserve System, *Banking and Monetary Statistics* (Washington, 1943), Table 137, p. 147; 1946-56: Securities and Exchange Commission data as reported in *Federal Reserve Bulletin*, various issues, e.g, July 1953, p. 756 and October 1957, p. 1164.

b *Productivity Prices and Incomes*, materials prepared for the Joint Economic Committee, 85th Congress, 1st Session, 1957, Table 47, p. 140.

Let us amplify this conclusion very briefly. The author takes bond prices and stock prices as his indicators of costs of financing (pp. 164-65). He notes that bond prices typically show a smaller amplitude of cyclical fluctuations than stock prices and turn down in expansion and up in contraction before stock prices which typically make their turns before business activity generally. The turning points in the ratio of stock prices to bond prices appear however to have coincided fairly consistently with the turning points in general business activity. Stock offerings in the market appear to follow the pattern of stock prices, rising with stock prices and falling when stock prices are falling. The extent of financing through bonds may be taken to be indicated by the net changes in bonds outstanding. This in turn is the difference between offerings of bonds and

99 *The Volume of Corporate Bond Financing Since 1900*, National Bureau of Economic Research, Princeton, 1953, especially Chapter four.

100 W. Braddock Hickman, *The Volume of Corporate Bond Financing Since 1900, op. cit.*, p. 134.

extinguishments of bonds in his language. Offerings consist partly of bonds issued for the purpose of refunding existing issues and partly of bonds issued to secure "new money". Extinguishments consist partly of refunded bonds and other repayments make up the remainder. Thus the net change in bonds outstanding is independent of refunding operations and may be viewed as new money offerings less repayments (apart from the retirement of refunded bonds). Bond refunding operations, we may observe, do appear to be very sensitive to changes in the corporate bond yield, rising as yields fall and falling as yields rise. Repayments of bonds tend to rise during expansion phases of the cycle and to fall during the contraction phase; repayments are frequently though not always made with the proceeds of stock issues. Bond offerings for "new money" tend to rise in the contraction and in the early expansion and to fall in the latter part of the expansion period. As a consequence of these cyclical changes in new money offerings and in repayments, the net change in bonds outstanding has more often than not been upwards in contractions and downwards in expansions. Thus the record exhibits a tendency for corporations increasingly to favour bond financing when the ratio of stock prices to bond prices falls and increasingly to favour stock financing when this ratio of prices rises. It need hardly be stressed that this pattern has not been exhibited in every business cycle since 1900, but the evidence does suggest a considerable degree of sensitivity of corporations to changes in these relative costs of financing over the course of the business cycle.

The statistics for Canada are very meagre and most difficult to interpret. The only official figures on issues of stock that have been attempted for the years 1946-51 are annual figures tucked away (sometimes in the text and sometimes in a table) of the Bank of Canada's Annual Report. There are figures on bond issues of corporations by quarters from 1937 to 1955 in the *Statistical Summaries* and their *Supplements* of the Bank of Canada, but a new series starting in 1952 was introduced in 1957 without any direct statement as to the difference between this series and the previous series. There is no official statistical series of corporate bond prices or yields. In Chart 6.3 the Dominion Bureau of Statistics "Investors' Index" of industrial common stock prices is plotted along with the McLeod Young, Weir index of the yields on 10 industrial bonds. We have looked mainly to these two series for an indication of the changes in relative prices of bonds and common shares. In Table 6.28, a few of the available statistics on corporate bond and stock issues are displayed. The figures in the National Transactions Accounts may be found in Part VI. We shall offer very brief comments on conditions in each year, but the story will be very incomplete.

In 1946, the first post-war year, there were massive movements through the corporate bond market, though the net change in bonds outstanding was virtually zero. It was a rather special year being immediately after

Table 6.28

CANADIAN CORPORATE SECURITY ISSUES[a] 1945-56

	Corporate bonds and debentures: New issues: New	New issues: Refunding	Retirements: Refunded	Retirements: Others	Net new issues	Common and Preferred Stocks: Net new issues
1945	79.2	107.3	110.2	76.5	—0.2	25
1946	125.3	460.8	460.4	126.5	—0.8	67
1947	267.5	203.5	197.7	152.0	121.3	110[b]
1948	274.0	20.6	26.3	67.9	200.3	55
1949	254.9	41.8	41.8	86.6	168.3	56
1950	438.7	55.6	55.6	91.1	347.6	154
1951	394.4	17.1	17.1	114.7	279.7	177
1952	532.5	30.3	30.3	158.8	373.7	234

	Canadian dollars	Other currencies	Total	Canadian dollars	Other currencies	Total	Canadian dollars	Other currencies	Total	Common stocks (Net new issues)	Preferred stocks (Net new issues)
1952	419	157	576	191	12	203	228	145	373	223	16
1953	402	114	516	148	13	161	254	101	355	185	51
1954	579	115	694	218	33	251	361	82	443	146	26
1955	681	9	690	331	46	377	350	—37	313	367	95
1956	819	229	1,048	212	19	231	607	210	817	510	171

a Par values in millions of Canadian dollars. For detail of conversions of foreign currencies see original sources.

b Before giving effect to retirement of Montreal Light, Heat and Power stock in the amount of $112 million.

SOURCES: 1945-52: Bonds, Bank of Canada, *Statistical Summary, Financial Supplement*, 1955, p. 36.
Stocks, Annual Report, Bank of Canada, various years.
1952-56: Bonds and stocks, Bank of Canada, *Statistical Summary*, Dec. 1957, p. 402.

the war, but clearly corporations were taking advantage of the lower interest rates that had been induced by official policy. Though stock prices drifted downward through much of 1946 there was a modest increase in stock financing.

In 1947 prices of Canadian government bonds were fairly steady and presumably much the same was true of corporation bonds. Stock prices changed very little though they were on the average lower than in 1946. There was still a very large volume of bond refinancing but a net expansion of outstanding corporation bonds took place. This was somewhat larger than the expansion of stock financing (excluding consideration of the fact that the taking over of the Montreal Light, Heat and Power Company involved a reduction in outstanding stock of $110 million).

In 1948 there was some fall in bond prices especially in the first part of the year while stock prices on the whole were higher than they had been in 1947. The changes were relatively small however. There was some falling off in stock financing and also in domestic bond financing[101] though total bond financing was somewhat higher. The year 1949 brought very little change in either bond prices or in stock prices, virtually no change in stock financing and a moderate falling off in bond financing.

On the whole, in the late forties the relative changes in bond prices and stock prices were small, and not much impression of sensitivity of corporations or lack of it to these prices can be gleaned from the very rough estimates that are available.

In 1950 there was very little change in bond prices over the course of the year, though because of a slight rise in late 1949 they were a little higher on the average in 1950 than they had been in the previous year. Stock prices on the other hand began moving up after the first quarter and from the end of March to the end of December, rose over 23 percent. Both bond financing and stock financing increased as the second post-war inflation gathered momentum with stock financing increasing proportionately more. While stock financing advanced nearly 180 percent bond financing increased some 106 percent according to the figures in Table 6.28.

In 1951 stock prices continued to rise while bond prices fell, and stock financing continued to rise while bond financing fell, which of itself is not evidence against the hypothesis that corporations were sensitive to changes in the relative costs of financing.

In 1952 stock prices drifted downwards irregularly through the year; bond prices rose slightly during the first half and then slipped back again in the last half.[102] Both stock financing and bond financing rose by about

101 In Appendix A of the Bank of Canada's Annual Report for 1949 it is estimated the net new issues of private corporation bonds payable in Canadian dollars fell from $276 million in 1947 to $213 million in 1948.

102 In the *Annual Report for the Year 1952* the Bank of Canada states: "Yields on outstanding high-grade non-Government of Canada bonds on the whole did not rise appreciably during 1952 but in the case of new issues there was some further increase in the cost to borrowers." (p. 10.)

one-third. It appears that most of the increase in bond financing may have been accomplished through foreign issues.[103] The bulk of the new foreign issues of bonds was accomplished in the first half of 1952 when the excess of Canadian bond yields over United States bond yields increased.[104]

In 1953 bond yields moved very slightly upwards over the year. The difference between Canadian and United States bond yields was reduced over the first four months, rising again in the balance of the year. The value of the United States dollar in Canada rose as the yield differential fell. Stock prices in Canada continued their irregular fall throughout 1953. Common stock financing fell off by 17 percent during the year. Bond financing was down in total about 4 percent which is not a significant change. Bond financing abroad was down just as it was in Canada, though the new issues of bonds abroad followed the course of the interest rate differentials, (with a lag of roughly one-quarter) decreasing when the excess of the Canadian yields decreased and conversely.

The year 1954 brought an increase of bond prices and of stock prices. The bond price change was sharpest in the first half; stock prices climbed throughout the year. The excess of Canadian bond yields over American declined throughout the year. The general picture of financing in 1954 shows a decline in net bond financing abroad, an increase in net bond financing in Canada and a decline in common stock financing. The decline in common stock financing of some 20 percent seems hardly consistent with corporate sensitivity to rising stock prices. But we may recall that bond yields in Canada did decline considerably and that corporate profits were falling in 1954. Moreover, there was a noticeable use of convertible debentures in the bond financing programme,[105] and as we have suggested these debentures represent a future issue of stock the precise amount of which is uncertain at the time of the debenture issue.

In 1955, bond prices fell in Canada, especially in the latter half of the year, while stock prices rose, especially in the first half of the year. The excess of Canadian over United States' bond yields declined sharply in the first half of the year and rose again in the latter part. Common stock financing was up substantially; roughly 70 percent of the increase occurred in the first half when stock prices were rising. Over the year bond financing in total was down some 30 percent. The decline in

103 In *The Canadian Balance of International Payments in the Post War Years, 1946-1952* (Dominion Bureau of Statistics. 1953) in Statements 9 and 10, pages 45 and 46, it is shown that in transactions with the United States proceeds of new issues of securities of Canadian corporations less retirements amounted to $107 million in 1952.

104 See Chart 4.3 above for the difference between Canadian and American government bond yields.

105 Required here are comparative figures of convertible bond issues in 1953 and 1954. See *Canada Year Book 1956*, p. 1129 where it is stated that: "A significant trend in the sale of corporate bonds in 1954 pertained to a greater offering of convertible securities as a means of raising additional equity capital. Practically all such issues met with a ready reception on the part of investors and many of them later sold at substantial premiums, reflecting the strength prevailing on the stock markets at the time. An increased emphasis on the convertible feature constituted a strong factor which tended to narrow the differential between bond and stock yields during 1954".

domestic financing was much less sharp than this; foreign financing, in the face of the very much lower differential in bond yields, was down very sharply, indeed considering bonds payable in foreign currencies, retirements exceeded new issues by a considerable margin. The domestic bond financing was concentrated in the first half when bond yields were drifting downwards very slightly.

The year 1956 was a year of tremendous pressure in the Canadian capital market and bond prices fell[106] with only slight interruption throughout the year. Stock prices rose until the end of August then fell, recovering again in December, to finish the year 13 percent higher than at the beginning. The excess of Canadian bond yields over American was substantially higher than in 1955 and generally rose through much of the year. Financing through common stock increased nearly 40 percent. Bond financing in total however increased by a little over 160 percent. Of total bond financing of some $817 million some $225 million was accomplished in foreign markets.[107] This net foreign financing increased throughout the year and over half was accomplished in the last quarter when Canadian bond yields were at their highest and the excess over American yields was at its highest for the year. A special consideration in the corporate bond market in 1956 was the very large placement of bonds of uranium mining companies, amounting to some $104 million of which $45 million was placed in the United States. Bond financing for these mining companies (which also was carried out in lesser degree in 1954 and 1955) was special in that firm contracts with the government permitted debt financing where ordinarily such mining developments would have been financed through stock issues. There was rather widespread use of mixed types of issues in 1956 especially preferred stock (net issues of preferred stock increased some 80 percent in 1956) and bonds with warrants attached. The uranium issues typically carried warrants as did several industrial issues. The use of warrants, while not confined to 1956 by any means, tends to increase as bond financing is undertaken in the face of rising bond yields. Net issues of bonds payable in Canadian dollars were highest in the first quarter and progressively somewhat lower in the second and third quarters, though the fourth quarter issues were a little higher than second and third quarter issues.[108]

Undoubtly the dominating feature of the external financing of corporations in 1956 was the buoyant optimism characteristic of this period of inflation and heavy capital investment. Nevertheless there was not a

106 And call privileges became rather less favourable to the lender as well.

107 This figure is somewhat higher than the $210 million shown as bond financing in other currencies in Table 6.28. The figure of $225 million includes net foreign issues of bonds payable in Canadian currency; it is taken from *Sales and Purchases of Security Between Canada and Other Countries, December 1956* and *Review of Security Trading During 1956*, (Dominion Bureau of Statistics, 1957), tables on page 2.

108 The quarterly figures for net issues of bonds payable in Canadian dollars were, in millions 168, 146, 142 and 151. In the first half of 1957 while bond yields paused in their upward march, net issues of corporate bonds payable in Canadian dollars increased remarkably, $209 million in the first quarter and $244 million in the second quarter. This however ended the dramatic rise.

complete lack of sensitivity to relative costs of financing as evidenced by the expansion of common and preferred stock financing, the very considerable resort to the United States market and the increasing use of bonds with warrants attached.

This review of the changes in bond versus stock financing in the light of changes in the domestic relative costs, and the relative costs of bond financing in Canada as compared with the United States, necessarily is unsatisfactory from the point of view of assessing the sensitivity of corporations to changes in these relative costs. The analysis would need to be much more detailed before one would be warranted in drawing firm conclusions. It is necessary to get down to the details of specific issues, the financial position and the character of the business of the issuing corporations. The Canadian capital market is still small enough that the aggregate figures may be very considerably affected by one or two particular issues. In addition to the effects of taxes and prices of goods already referred to in some detail, many other considerations apart from relative costs affect corporate decisions as to the character of their financial operations. Expectations of future developments are important. Optimism over the future prospects was undoubtedly a factor influencing decisions in 1954 for example, when bond financing was increased and many corporations chose to use the convertible debenture. Corporations are necessarily sensitive to their debt-equity ratios. Some corporations because of the nature of their business are prepared to contemplate much larger leverage ratios than others. (We have noted much earlier in this chapter the differences in this ratio among corporations of various sizes and in different industries.) The practice of financing through retained earnings and depreciation allowances also varies among industries. It is necessary then in examining the figures to consider which corporations are issuing bonds or stocks—whether they are large corporations or smaller ones, whether they are public utilities, mining companies or trading companies. Moreover, corporations must necessarily be sensitive to the importance of timing their approaches to the capital market. Too frequent an approach to the market with bond issues will prejudice the market against a corporation's bonds. If the expanding corporation has been financing much of its expansion through bond issues it may, in the interests of maintaining what it regards as a desirable capital structure, feel obliged to obtain its next batch of external funds through a stock issue even if costs of stock financing move against it. Thus again it is necessary to examine details and to relate current financing patterns to recent patterns, for the recent patterns limit present opportunities.

While we must yet wait for the necessary basic research to be done before drawing firm conclusions about the degree of sensitivity of corporations to changes in relative costs it is nevertheless possible to state certain tentative conclusions on the basis of the broad review given above. It

would be difficult to deny that relative costs of financing are *one* of the important factors influencing the form of external financing by corporations. There is ample evidence that differences in bond yields between Canada and the United States influence decisions as to whether to float corporation bonds and debentures domestically or in the American capital market. While the changes in relative costs of domestic issues were so slight in the late forties one cannot form any impression of the degree of sensitivity of corporations to them. In the fifties changes were more marked and in 1950, 1951, 1953 and 1955 the changes were consistent with the hypothesis that relative costs are an important consideration and that an increase in the relative cost of a particular form of financing will lead to an increased emphasis on that form. In 1954 one might have expected common stock financing to have increased rather more, but on the other hand a significant portion of the debenture issues were convertible issues. In 1956, though bond issues increased rather more than one might expect on the basis of the hypothesis, there were some extenuating circumstances to which we have alluded. On the whole then there appears to be a considerable degree of sensitivity to relative costs of financing, though at times other considerations may have overriding influence on corporate decisions.

3. *Miscellaneous regulators*

In this subsection we shall refer very briefly to certain regulators of the flows of funds in the business sector of the economy other than taxes, the prices of goods and the costs of capital funds. In particular we shall allude to business conventions and practices, the regulation of the issuing and trading of securities and monetary policy.

a. Business conventions and practices.

In discussing other regulators of the flows of funds we have, on several occasions, referred to the importance of business conventions and practices in guiding the decisions of those who seek funds for business purposes. Here we wish to do no more than recall the fact that these conventions are an important part of the regulatory mechanism. It should perhaps also be recalled that security buyers as well as security issuers adhere to certain conventions in their decisions. We have already referred to the conventions of consumer-investors; we shall refer to conventional practices of some of the financial institutions in the next chapter. In this chapter we have concentrated on the businesses which issue securities.

In most lines of business there exist fairly definite views as to the ranges within which ratios of items in the balance sheet should properly lie. In particular there are concepts as to desirable ratios among elements of the capital structure such as reserves, short-term debt, long-term debt, preferred and common stock. These views or concepts modify the reactions of businesses to changes in the relative costs of raising funds.

There are also conventional views as to the proportion of current income which should be retained in the business. This conventional proportion is not the same in all types of business of course, nor necessarily the same among all firms in any particular line of business. Moreover the view is not held rigidly; the pay-out ratio varies with the fortunes of the enterprise. But there are limits to its variation, and accordingly it is an important factor influencing the choice between "internal" and "external" financing of current operations and expansion.

Similarly, the decisions as to the allowances to be made for depreciation, obsolescence and a variety of other contingencies have a conventional aspect to them and thus here again business conventions affect the allocation of funds.

No doubt other conventions could be cited. Perhaps, however, conventional views as to the capital structure, the "pay-out ratio" and the provision for depreciation and contingencies are the most important from our point of view. We do not contend that these conventions are necessarily irrational in any sense. On the contrary, they represent a distillation into loose rules-of-thumb of feelings as to appropriate defences of a business against the risks and uncertainties it faces. Nevertheless they provide the framework within which the decisions and choices are made. They provide limitations to the impact on businesses of changes in the other regulators of the flows of funds.

b. The regulation of the issuing and trading of securities

There are many aspects of the regulating of the issuing and trading of securities that are of no direct concern to us here, and we shall not discuss the subject thoroughly. There are two specific aspects of the matter that are directly relevant to the channelling of funds however, and these we shall discuss briefly. In the first place, a general object of much of the regulation of securities transactions is to ensure that investors are provided with adequate and accurate information concerning the securities. In the second place a specific object is to ensure that funds raised through the issue of certain classes of speculative securities are channelled in reasonable proportions to promotors on the one hand, and the treasuries of companies on the other hand.

There are several bodies responsible for securities regulation. It is a matter which falls within the jurisdiction of provincial governments and in several provinces there are special arms of the government, securities commissions, charged with administering the relevant acts. In addition to provincial authorities regulatory measures are enforced by private authorities, in particular the stock exchanges (of which there are six in Canada), the Investment Dealers Association in Canada and the Broker-Dealers Association in Ontario.

Let us illustrate the two aspects of securities regulation we have mentioned above in terms of the rules imposed in the Province of Ontario.

A feature of the Ontario Securities Act [109] is its control over companies issuing securities for public distribution. This control is exercised by prohibiting the primary distribution of securities until certain conditions have been met. "The more important conditions include the acceptance for filing by the (Ontario Securities) Commission of a prospectus containing a full, true and plain disclosure concerning the securities to be distributed; where the securities to be distributed are those of a mining company, the receipt by the Commission of a report upon the property and its development prepared by a mining engineer, geologist or prospector whose qualifications are acceptable to the Commission; . . . the receipt by the Commission of acceptable financial statements of the company in question."[110]

There are exemptions from these filing requirements. For example, it is not necessary to file prospectuses and financial statements for securities issued or guaranteed by governments, for securities in which trust funds may lawfully be invested in Ontario, for securities issued by private companies and for additional securities being sold by a company to present holders of its securities.[111]

Another important provision exempts securities listed and posted for trading on any recognized stock exchange where actually sold through the exchange. In the case of such securities control rests with the recognized stock exchanges. Thus for example in Ontario, the Toronto Stock Exchange excercises control over the primary distribution of a great many of the issues of mining and oil development companies. The listing requirements of the Exchange include the acceptance for filing by the Exchange of detailed information concerning the affairs and intentions of the company.

The Chairman of the Ontario Securities Commission in discussing the "full disclosure" provisions of the Ontario legislation has stated: "Full disclosure is designed to give the prospective purchaser of securities all the material facts in order to enable him to decide on the merits of the issues for himself".[112] By thus contributing to the dissemination of information in the securities market, the Securities Commission, the Stock Exchange, and the other regulatory bodies, affect the flows of funds in a general way and contribute substantially to the effective operations of the capital market.

109 Revised *Statutes of Ontario, 1950,* Chapter 351 and subsequent amendments.

110 W. W. Cameron, "Securities Legislation, Administration and Marketing in the Province of Ontario, 1956", *Bulletin of the Ontario Securities Commission,* November 1956, p. 11.

111 *Ibid.*, p. 18.

112 O. E. Lennox, "Securities Administration and Legislation", in *Proceedings of the Fourth Annual Conference of the Institute of Public Administration of Canada 1952,* (edited by Philip T. Clark) p. 68.

In addition to this general regulatory function, the Securities Commission and the Stock Exchange administer rules designed to ensure a reasonable distribution of the flows of funds from new security issues between the promoters and the treasury of the enterprise. These rules apply to the financing of mining and oil development companies. We refer particularly to the provisions requiring shares of companies which are granted to vendors of properties and certain others, to be placed in escrow, and to the provisions which regulate underwritings and options. The escrow arrangements by which vendor shares are released from escrow only as shares are sold from the company's treasury or as successive stages in the development of a property are reached, protect the promoter by assisting him to float securities from the treasury without having to worry about the market being spoiled by an avalanche of vendor shares, and in so doing, assist in the securing of funds for the development of the enterprise. The underwriting and option regulations specify minimum amounts of an underwriting, minimum prices for the underwritten shares, minimum spreads between the prices at which shares are optioned, maximum numbers of shares to be optioned at each price and maximum time limits for the exercise of options. These regulations are designed to ensure that the promoter acts in good faith as it were, and endeavors to secure funds for the company though not, of course, without reward to himself. The regulations laid down by the Securities Commission governing shares issued through the unlisted or over-the-counter market differ somewhat from those laid down by the Toronto Stock Exchange Commission[113] governing the issue of listed securities, but in both cases they are designed to accomplish the same end and operate as regulators of the flow of funds to mining and oil development companies.

c. Monetary policy

In this chapter we merely record the fact that monetary policy and associated policies are very significant regulators of the flows of funds to business and leave more detailed discussion until Chapter 9.

D. Summary and Concluding Observations

In this chapter we have discussed some of the facts concerning the finance of business and we have considered the workings of some of the regulators of the flows of funds to the business sector. The very diversity of business has made for a very long chapter. Even so there are important facts of the subject that have been omitted. For example, even though government enterprises demand funds in very large amounts — in some years their net demands on other sectors have exceeded those of private non-financial corporations — we have not attempted to describe the financing of their operations. Also, we have not examined the specific

113 The regulations of the Ontario Securities Commission are set forth in the *Bulletin* of the Commission of June 1955. The regulations of the Toronto Stock Exchange are set out in its Circular No. 5 entitled "Procedure for handling Notices of Proposed Sales and Options of Treasury Shares of Listed Companies received pursuant to By-Law 62".

problems of financing the public utilities which sell their services at rates fixed by official administrative tribunals but which nevertheless must appeal to investors through the private capital market for the funds to finance their expanding operations. Similarly, we have not been able to analyze in any detail the relative importance of the principal sources of the external funds supplied to non-financial corporations. On this point we are greatly hampered by the lack of adequate statistical material. Indeed, at several points in the chapter we have had occasion to note the gaps in our information concerning the financing of business. In this final section of the chapter we shall review the ground covered very briefly and offer a few general observations concerning the financing of business.

We noted first of all that while the business sector of the economy typically is a net demander of funds from other sectors it is at the same time one which annually saves a very large volume of funds. The saving is comprised in part of retained profits and depreciation or depletion allowances; retained profits, though they have increased absolutely in the post-war years, have increased much less rapidly than the other forms of business saving.

In reviewing some of the facts of agricultural finance, we referred to data for the United States as well as for Canada and drew broad comparisons as between the two countries.

In the United States, it appears that since the nineteen thirties the agricultural sector of the economy has been a net supplier of funds to the rest of the economy though less so in the post-war years than during the war. We cannot be sure that in Canada the agricultural sector has been a net supplier of funds, but we can be reasonably confident it has not been a net demander of funds in large degree or in as large degree as say in the twenties. The capital investment in agriculture in the post-war period has probably arrested, for the time being, this growth in the over-all "self-sufficiency" of the sector. Farmers nevertheless remain the most important suppliers of funds and especially long-term funds, to farmers.[114] Apart from individuals, government agencies especially the Veterans' Land Act Administration are the most important suppliers of mortgage money to farmers in Canada, the major financial institutions such as the life insurance companies having reduced their contributions to the supply very drastically since the 1930's. Banks are particularly important as suppliers of intermediate term debt, their contributions being made for the most part as guaranteed loans under the Farm Improvement Loans Act of 1944. Short-term credit is supplied to farmers from a variety of sources.

The high risks of investment in agricultural enterprise resulting from its dependence on the vicissitudes of the weather, from the fact that such

114 Of course behind such an assertion lies the convention that farmers' saving originates within the agricultural sector even though it derives in large measure from profits on the sale of crops to other sectors.

enterprises are ordinarily established as proprietorships and from the rather marked fluctuations in price that arise out of the comparative unresponsiveness of demand for and supply of agricultural products to changes in their prices have restricted the sources of agricultural credit. Private financial institutions expect rather a high rate of return before they view investment in agriculture as desirable in relation to alternative outlets for their funds.[115] Individuals who invest in someone else's farm are often relatives of their debtors or in a position to maintain some personal watch over the development of the enterprise in which they have invested. It has long been the view that the price system, in the ordinary course of its operation, could not yield credit or capital for farm enterprise in adequate amounts at rates of return deemed to be satisfactory by farmers and by governments. Accordingly, provisions have been made to supplement the allocations of funds to agriculture made through the ordinary working of the price system by establishing government lending organizations and government guarantees on loans by existing institutions. As matters stand now in Canada by far the largest proportion of long-term and intermediate-term credit supplied to farmers by non-individual suppliers is furnished under these government arrangements which were discussed in some detail above. The rates of interest charged by these organizations are not wholly inflexible, though being fixed by administrative decree, they reflect only the major or prolonged pressures in the capital market. It could be argued that in the case of the vast majority of loans made through these agencies there is an element of subsidy in the rate of interest charged, this element of subsidy is much larger in the case of loans at 2½ percent by the Quebec Farm Bureau than loans at 5 percent by the Canadian Farm Loan Board.

Of course the rate of interest is only one feature of the loan contract. The term of the loan is exceedingly important and also serves as a regulator of the flows of funds. It tends however to be a very inflexible regulator, changing only infrequently. With respect to loans made under the Canadian Farm Loans Act, the maximum allowable term was recently extended from 25 to 30 years by an amendment to the Act. Many persons conversant with the long-term credit needs of farmers agree that if the government wishes to support agricultural enterprise through its lending agencies it should be prepared to extend mortgage loans having a term of 40 years or perharps longer.[116] Such an extension, by reducing the annual servicing costs of a given size of loan at a given rate of interest, would in particular facilitate the transfer of farm ownership from retiring to young farmers, in a period when growing mechanization of the farm increases the total

115 In addition, many were affected by the moratorium legislation introduced in several provinces during the depression and still in effect in Saskatchewan.

116 See for example the evidence of the late Dr. E. C. Hope before the Standing Committee on Banking and Commerce of the House of Commons, *Minutes of Proceedings and Evidence*, No. 2, 1956, pp. 81-83 and 88-89. By contrast, the Nova Scotia Royal Commission on Rural Credit recommended that government mortgage loans to farmers continue to be made for a maximum term of 30 years. This Commission did recommend some increase in terms of loans under the Farm Improvements Loans Act, however. See this report p. 73.

capital investment required and in a period when the proportion of their equity which retiring farmers wish to withdraw apparently is also increasing. Farms, being organized largely as individual proprietorships, must change hands at least once each generation and with the average size of farm increasing and the ratio of fixed capital per farm also increasing with each generation many feel that the crucial problem in agricultural finance will increasingly become that of providing credit on suitable terms to facilitate these transfers of ownership.[117] There seems little doubt that this problem will have to be resolved by government action, it being unlikely that private institutions or practices will evolve in the capital market to meet it.

In discussing the financing of small business in fields other than agriculture, mining and oil, we noted that commercial banks played the dominant role in providing credit to these organizations and that individuals and retained profits were the principal sources of equity capital. Being small, these businesses are precluded from making public issues of securities either because of the very high underwriting costs of small public issues or because they are not incorporated. (The vast majority of small enterprises are unincorporated.) Moreover, even if a business is incorporated and could manage the underwriting costs of a public issue, if it is a new enterprise it has no record of earnings to present to the market and it is likely that the market for its securities would be very "thin" for a considerable time. On these accounts the costs of public funds, over and above the underwriting costs, would be relatively very high. Accordingly such firms have typically to secure their longer term funds by private placements of bonds, notes, common or preferred stock and ordinarily they are unable to tap the larger institutional sources of long-term funds.

In 1944 it was felt that there was need for an institution in the Canadian capital market that would specialize in providing longer term finance to small and medium sized business and supplement existing arrangements for supplying this service. This feeling apparently was not held strongly enough in the capital market to tempt private capital into such an organization. In any event the Industrial Development Bank was established in that year; it has drawn all its "external" capital from the Bank of Canada even though its statute allows it to make public issues and no one would deny that it has played a very important role. The President of the Bank has stated that: "We have been in operation now for ten years and we have barely earned interest on our money without paying income tax . . . If somebody else is going deliberately to set up a similar institution, they will have to put a lot of money into it and be content to wait a long long time for any profits . . . If we should have twice the number of loans, then we would only have a 20 to 30 percent increase in our cost, and we could see better borrowing results".[118] In the *Annual Report* of the

[117] See W. M. Drummond and W. Mackenzie, *Progress and Prospects of Canadian Agriculture*, Royal Commission on Canada's Economic Prospects, Ottawa, 1957, p. 358.

[118] Standing Committee on Banking and Commerce, House of Commons, *Minutes of Proceedings and Evidence*, No. 7, 1956, p. 252.

Bank for 1957 it is stated that: "Net profits in 1957 were at the rate of 3.8 percent of the average amount of capital and reserves outstanding as compared with 3.9 percent in 1956". (p. 13.) The writer has not discovered any public statement to indicate precisely how the interest rate on the debentures sold to the Bank of Canada is arrived at nor what it was on any particular occasion, but there seems ample ground for the belief that the cost of funds borrowed from the Bank of Canada is somewhat below the cost that would have to be paid on funds borrowed in the market. The rate of interest normally charged by the Industrial Development Bank at any time is known, and it varies from time to time in accordance with conditions in the capital market.

Responsible opinion is frequently expressed to the effect that the existing institutions and practices in the capital market are still not adequate to meet the "legitimate needs" of small business. It is difficult to assess these views. Sometimes they are veiled requests for subsidies, and while there is nothing wrong with requests for subsidies their merits have to be judged on different terms than arguments to the effect that rigidities of one kind or another in the capital market prevent the free flow of capital into particular channels. New and small businesses are inevitably at a disadvantage as compared with established profitable businesses in obtaining funds either internally or externally.[119] It is a fact that in general such businesses are riskier, and that funds have to be secured by interesting and persuading particular investors as to the merits of the proposal.

Anyone who wishes to argue that there are situations in the field of small business with which the existing capital market is ill equipped to deal must show first of all why private enterprise has not moved to meet the situation and secondly why the Industrial Development Bank is inadequate. Private enterprise is, after all, exceedingly resourceful in searching out opportunities for profit. This is evidenced no less in the capital market than in other markets of the economy. Within recent years, and since the founding of the Industrial Development Bank, private development banks or companies have been founded to profit from specific opportunities for assisting new or small business. The Industrial Development Bank in 1956 secured legislative approval to extend the scope and amount of the accommodation it provides to small and medium sized business. There seems to be widespread agreement that one of the particular problems of small business is the securing of equity capital although it is equally widely recognized that the principals in small businesses are typically averse to sharing control widely. The Industrial Development Bank does not often take an equity position in the businesses it assists,[120] but the Bank has authority to hold equities of the concerns it finances. We do not

119 Though the lower corporation income tax rate on the first $25,000 of taxable income gives them a special advantage in terms of the proportion of earnings before taxes that can be available for retention in the business.

120 It was pointed out earlier that only occasionally has the Bank taken an equity position and then only to support a relatively large loan.

know what proportion of its disbursements is made to new business ventures.

In summary, if small business in Canada is being regularly deprived of capital funds simply because of some anomaly of the capital market it is not glaringly obvious.[121] Existing private institutions have shown adaptability, new institutions have emerged to meet particular needs and the public institution has expanded both the amount and range of its activity and has still unexploited means of assisting small and medium sized enterprises.

Brief attention was given in this chapter to the financing of nascent mining and oil development companies. Here is an example of highly speculative enterprise that has succeeded in raising through the public issue of equities, substantial blocks of funds, and very elaborate machinery such as the stock exchange and specialists such as promoters, brokers, dealers and the like have emerged to assist in the raising of this capital. That public equity financing of this type of small or medium sized enterprise has proved possible where it has not in the case of small businesses in the service, trade or manufacturing industries, for example, is to be attributed largely to the fact that though the risks are high in both cases, the rewards of success are very much greater in the case of these resource industries and small investors in large numbers can be enticed to gamble rather small amounts each.

The working of the price system in this area of the economy is by no means sluggish. Increases in the prices of metals or oil stimulate the flow of capital into prospecting for and development of new reserves of the resources. In the markets for the securities of the development companies the sensitivity of buyers and sellers to changes in prices of the securities often tends to accentuate the changes rather than to arrest them. Thus an increase in the price of a security often tends to stimulate rather than depress the demand for it. This characteristic reaction to price changes is relied upon to a very large extent by the promoters whose function it is to secure funds for the smaller mining and oil companies. It has been found desirable, however, to control their activities to some extent by methods which directly limit the diversion of funds from company treasuries and which provide as full information to investors as possible so that they may if they wish base their judgments on more information than merely the fact that the price of a security has risen or that some irresponsible person says it may rise. We also discussed the special taxation incentives given to developments of mining and oil ventures and noted particularly the complaints that Canadian tax law by granting incentives which are in some respects less liberal than those granted under United

121 Further reference to this matter is made in the discussion of the ceiling on bank loan charges in Part B of Chapter 8.

States income tax law favours development of Canadian oil resources by foreign-owned corporations.

In discussing the financing of corporations generally we reviewed as background the transactions accounts for the non-financial corporations in the post-war years and presented information on the distribution of assets and liabilities of these corporations by industry and by size. We discussed taxes as regulators of the flows of funds. In this connection the question of the shifting of the corporate tax was analyzed, the conclusion arrived at being that while an increase in corporate tax rates is ultimately passed on to consumers or workers its immediate impact is on the corporation stockholder and the burden is shared by the stockholder during the period when shifting is being effected. The immediate effect of an increase in tax rates is to reduce the amounts available for retained earnings but as the tax is shifted this effect is diminished. Moreover, inasmuch as the corporation tax leads to a favoring of debt issues over all other kinds of external financing (whether the tax is shifted or not), and inasmuch as there is a limit to the ratio of debt to equity that any corporation is willing to contemplate, retained earnings are encouraged by an increase in corporation tax rates. We explained that the tax laws relating to depreciation and depletion allowances affect the volume of business saving and the distribution of business investment expenditure as between classes of assets and as between industries.

We raised the question as to whether the increasing reliance of corporations on their own saving as the source of funds for financing expansion warranted the conclusion that the effectiveness of the price system in regulating the allocation of resources was thereby reduced. Recognizing the lack of any definitive scale by which to rank projects in advance of their execution and the ultimate need to rely on the profitability of enterprises as indication of their right to renewed claims on resources we argued that the increasing self-financing of corporations could not of itself be construed as contributing to a misallocation of resources. We further recognized that in any event for most major projects corporations have to come to the capital market for a proportion of the financing required and that accordingly these projects benefit from whatever testing the capital market is able to offer. In short we emphasized the role of the goods market in testing the performance of businesses.

The question of the sensitivity of corporations to changing differences in the costs of raising funds was also explored in connection with the role of prices as regulators of the flows of funds. It was concluded that corporations are indeed sensitive to changes in these relative costs though reactions are necessarily tempered by considerations of taxes, existing capital structure, recent financing patterns and, as will be argued further in the next chapter, by the rules and conventions under which major financial institutions operate. We pointed out that information on this subject

is not now marshalled so as to permit as detailed a study of this particular question as would be desirable in the light of its very great importance.

In Chapter 2 we outlined conditions for the effective operation of the price system in the capital market. Let us conclude this chapter with a brief reference to these conditions and to considerations relating to them that arise out of the discussion in this chapter.

It was asserted that one of the conditions for the effective operation of the price system in the capital market is that there be fairly continuous trading in substantial volume in the assets exchanged. The markets for the securities offered by Canadian business display about all of the gradations possible in respect of this requirement. On the one extreme are the shares of large or well-known corporations that are listed by the stock exchanges. For most of these securities there is a ready market, continuous trading and widespread dissemination of information concerning prices bid and asked. At the other extreme are mortgages of small concerns, incorporated or unincorporated, and the shares of closely held small (and occasionally large) corporations for which virtually no market whatever exists. In between are the over-the-counter markets in corporation bonds and unlisted shares, and trading in many of these securities is desultory or impossible (except at sacrifice prices).

Improvements in the working of the capital market in respect of this condition cannot be wrought quickly. They emerge as the market grows and expands. Small issues of obscure companies, like small issues of relatively unknown municipalities, will always tend to be locked away by the purchasers or traded off only under duress and at some sacrifice. But as the number of larger seekers of funds and the number of suppliers in the market grows, the proportion of the value of outstanding issues which is traded among security holders may be expected to increase.

There is one aspect of this matter on which we might comment specifically; this is the fairly common practice — at times encouraged by some financial institutions — of direct placement of corporation securities by the issuer with the institutional buyer. This practice is not undesirable from every point of view; it is sometimes the only feasible means of placing the securities of smaller and less well known enterprises. However, when large proportions of the big issues of the larger companies are placed privately with one or a few institutions it is clear that the practice involves some undesirable features. If an issue is placed with very few buyers it is most unlikely that an "after market" in these issues will develop. This reduces the manoeuvrability of the institutions concerned and may well prejudice the legitimate interests of future seekers of funds from these institutions. There is usually a price advantage to be had from direct placement, especially as many institutions are not interested in trading

securities actively but it seems unnecessary and undesirable that large well-established businesses should claim this particular advantage.

A second condition for the effective functioning of the market is that borrowers and lenders be responsive to price changes. We have discussed this matter at some length in this chapter in connection with the sensitivity of corporations to changes in the relative costs of external funds and have already alluded to it in this concluding summary so that there is no need to discuss it further here.

A third condition is that rates be free to move. There has been very little occasion to refer in this chapter to inflexible prices in the markets for business securities. We have remarked that the rates charged by the government lending agencies change only infrequently or in a few cases not at all. But this is a matter which will receive more attention in the discussion of banking and monetary policy.

The final condition for the effective operating of the price system that we cited is that non-price barriers to the supplying and obtaining of funds be kept as low as possible. One of these barriers is the cost of underwriting and issuing securities.[122] We mentioned a recent change in the tax legislation by which corporations are permitted to charge some of these costs as expenses. These public issuing costs are relatively very much higher for smaller companies; thus for a bond issue of $20 million by a well-known company the underwriter may take 2½ percent. On a $100 thousand bond issue by a less well-known company selling costs might be of the order of 15 percent.[123] Costs of preparing prospectuses and other legal costs are in addition to these underwriting costs. Undoubtedly it is very much more difficult to sell issues of less well-known companies so that it is improbable that the differential could ever be eliminated. This does nevertheless seem to be a prohibitive barrier to the public offering of small issues, and inasmuch as very little is known generally about the specific ways in which these costs are built up it would seem to be a matter meriting detailed study to discover whether any improvements could be effected.[124]

Another of the non-price barriers to the flows of funds is the barrier of ignorance as to the opportunities available. The stock exchanges, the securities commissions, the financial press all contribute to the spreading

122 We agreed in Chapter 2 to refer to this as a "non-price" barrier.

123 In citing this figure the writer has the specific case in mind of Husband Transport Limited, which, according to the *Bulletin* of the Ontario Securities Commission of January 1957, in offering $102,100 5½% Sinking Fund Debentures to the public at par undertook to limit commissions of salesmen employed by it and of registered security dealers to 15 percent of sales. (See p. 5).

124 The President of the Industrial Development Bank was asked this question: "What would you say, Mr. Coyne, is the minimum requirement of funds that would enable a company to float a bond issue?" He replied as follows: "I do not know. That is something on which there is not nearly enough information. I think possibly people have been a little defeatist about that, both the borrowers and the investment dealers. I think we could start exploring with the investment dealers that very problem from two points of view: first, there is the question of fact, what sort of costs are involved and have to be involved and that sort of thing; secondly, whether conceivably we (the IDB) can be associated with them in underwriting and reduce the risk element that way. We would expect a fee for our services, you understand." . . . Standing Committee on Banking and Commerce of the House of Commons, *Minutes of Proceedings and Evidence*, 1956, p. 274.

of information concerning investment opportunities and sources of funds available, but there is always room for improvement in this connection. The larger businesses are able to draw upon the expert counsel of the investment dealers; the smaller businesses are not always so well served. For example the Saskatchewan Royal Commission on Agriculture and Rural Life has reported that: "In many cases, farm people were not aware of the credit facilities that are available. This lack of knowledge has no doubt reduced the demand for credit. Others were not aware of the ways in which credit could be used to increase productive efficiency".[125] One might hazard the guess however that ignorance of opportunities is less of a barrier to the effective operating of the capital market from the side of the seeker of funds than it is from the side of the investor of funds. Seekers of funds can of course assist the suppliers of funds in this respect by providing frequent and comprehensive reports on their affairs. Many Canadian public companies have deliberately made an effort in recent times to improve their annual and other reports. All efforts in this direction must contribute to the more effective working of the financial machinery.[126]

Our study in Chapter 5 of investments made by individuals and of the financing of business in this chapter has shown that individuals are the principal suppliers of external equity capital to business, both large and small. Of course individuals also hold business debts and indeed are very significant mortgage lenders especially to farmers but also to some other kinds of small business operators and to home owners as well. The principal holders of business debts, especially of larger businesses and of residential mortgages however, are the financial institutions. The ratio of debts to equities in their portfolios is very high indeed. We must now turn to consider the larger financial institutions in detail.

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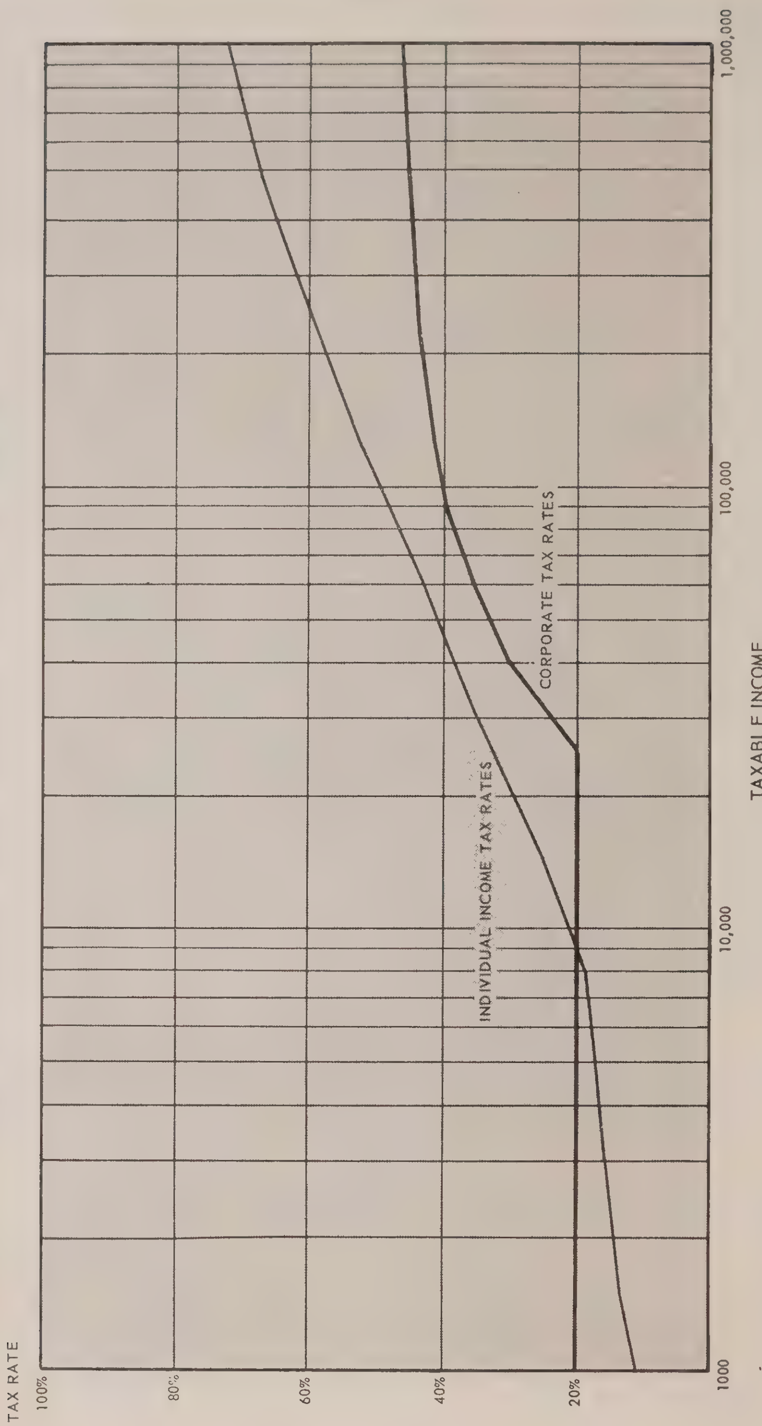
125 Saskatchewan Royal Commission on Agriculture and Rural Life, Report No. 3, *Agricultural Credit,* (Regina, 1955) p. 19.

126 In its brief submitted to the Royal Commission on Canada's Economic Prospects, The Security Analysts' Association of Toronto made special reference to the frequency and quality of the reports issued by Canadian companies. On the basis of a survey of the reporting habits of 175 Canadian companies listed on the Toronto Stock Exchange this Association stated (on p. 13) that:

> "... in 1954 only 22 percent of the companies surveyed issued quarterly reports. (A further 12 percent issued semi-annual reports.) This is in sharp contrast with American practice. It should be noted that subject to special exceptions all companies listed on the New York Stock Exchange must make such reports. In 1954, only 48 percent of the companies surveyed by the Association provided sales figures in their reports, whereas this is almost a universal practice for American corporations."

Chart 6.1

RATES OF TAXATION IN CANADA ON CORPORATIVE AND INDIVIDUAL INCOMES



Source: Table 6.23

Chart 6.2

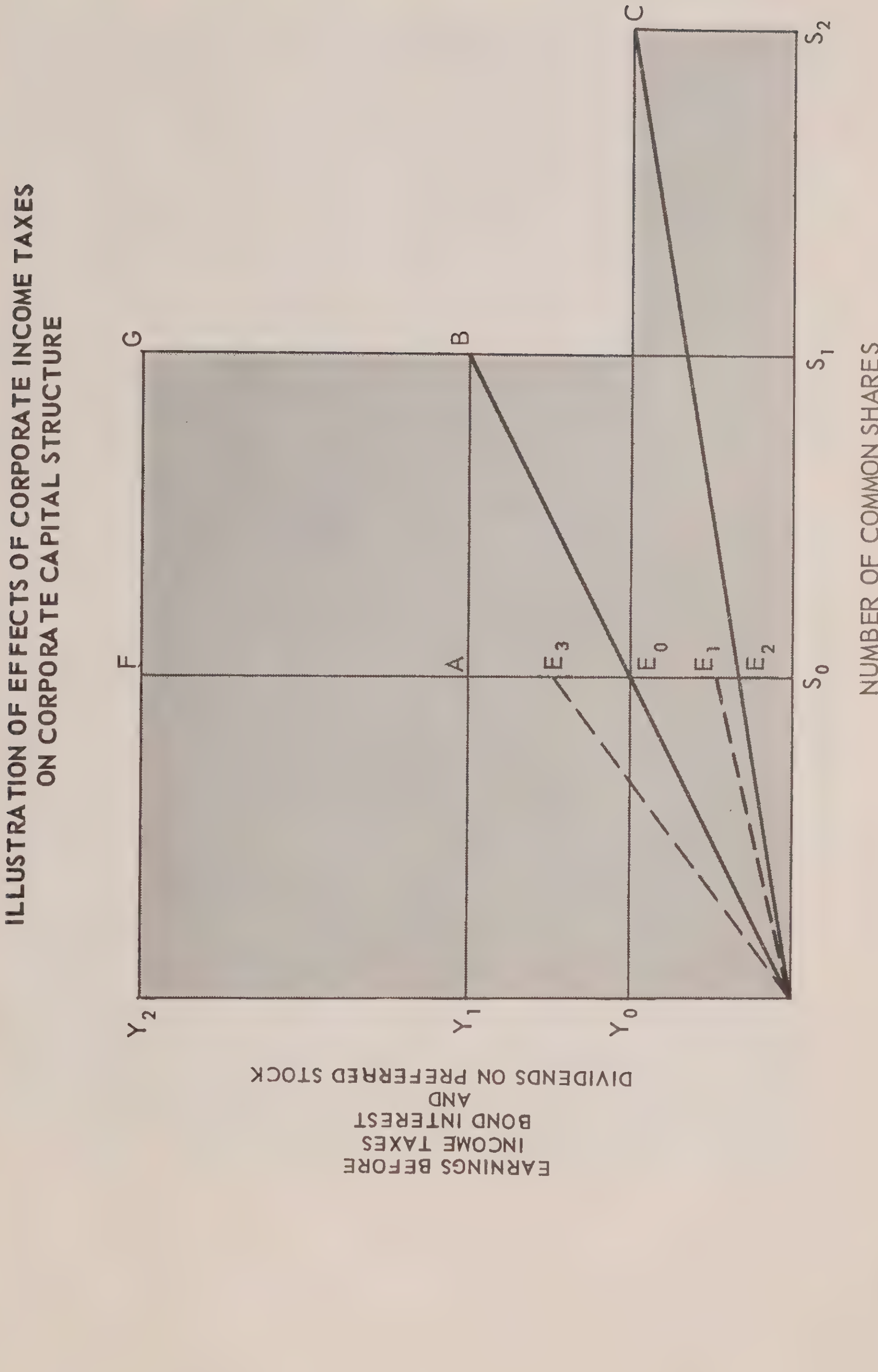
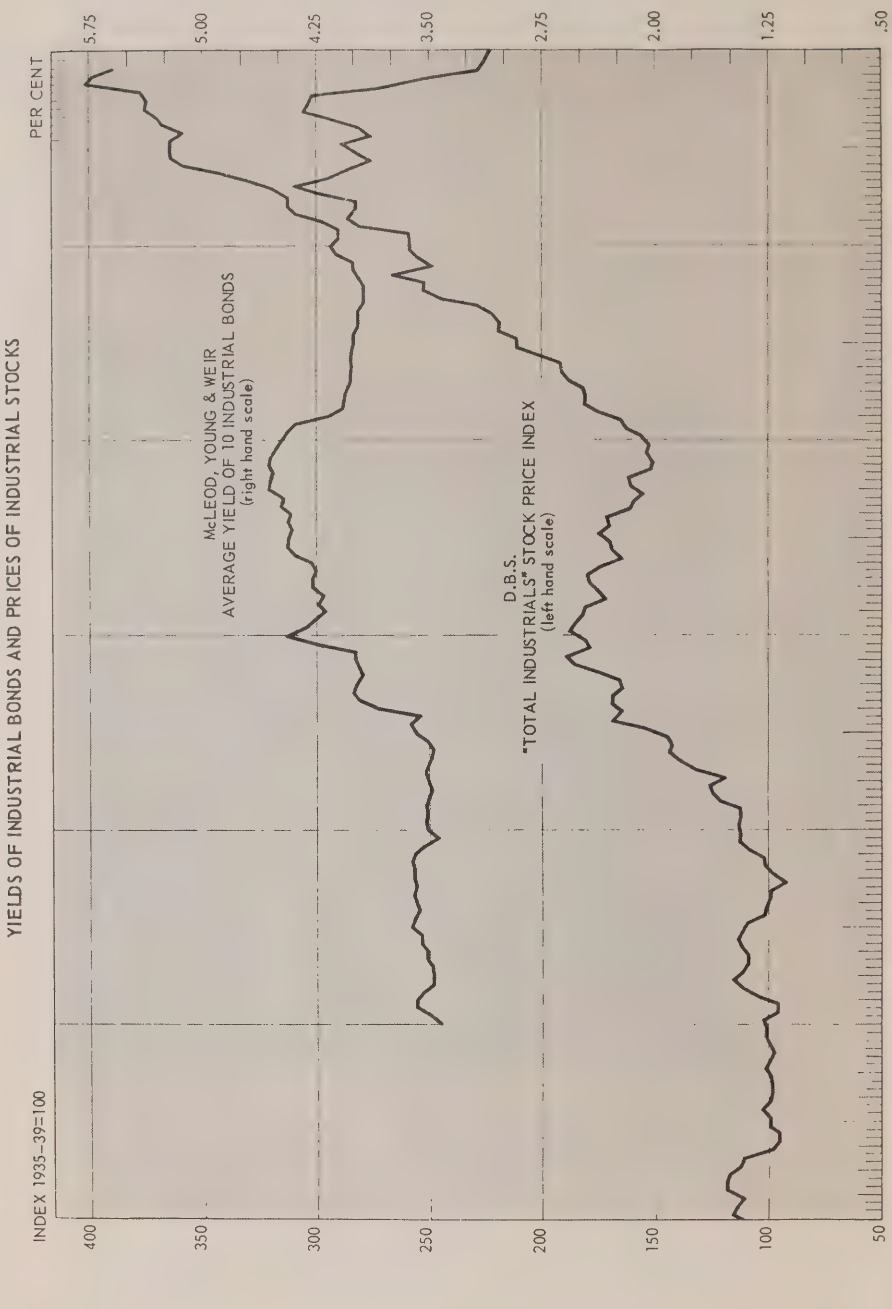


ILLUSTRATION OF EFFECTS OF CORPORATE INCOME TAXES
ON CORPORATE CAPITAL STRUCTURE
EARNINGS BEFORE
INCOME TAXES
BOND INTEREST
AND
DIVIDENDS ON PREFERRED STOCK
NUMBER OF COMMON SHARES
Y_0
Y_1
Y_2
S_0
S_1
S_2
A
B
C
F
G
E_0
E_1
E_2
E_3

Chart 6.3


YIELDS OF INDUSTRIAL BONDS AND PRICES OF INDUSTRIAL STOCKS
INDEX 1935-39=100
PER CENT
McLEOD, YOUNG & WEIR
AVERAGE YIELD OF 10 INDUSTRIAL BONDS
(right hand scale)
D.B.S.
"TOTAL INDUSTRIALS" STOCK PRICE INDEX
(left hand scale)
400
350
300
250
200
150
100
50
5.75
5.00
4.25
3.50
2.75
2.00
1.25
.50
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957

PART IV

FINANCIAL INSTITUTIONS

7

LIFE INSURANCE COMPANIES AND SELECTED OTHER FINANCIAL INTERMEDIARIES*

A. Introduction

The financial intermediaries are institutions engaged primarily in exchanging financial assets and liabilities (as these were defined in Chapter 2). As such they provide an extremely important channel, or set of channels, through which funds may flow from sectors having a surplus in their non-financial transactions to sectors having a deficit. Perhaps it is more helpful to think of the intermediaries as operating pools of funds fed by the proceeds of the sale of their obligations to households, firms and governments in other sectors of the economy, and drained by their purchases of the obligations of these other sectors. The channelling of funds through the financial sector is of course often very indirect; thus for example, banks exchange their deposit liabilities for funds which they in turn may invest in loans to finance companies which the finance companies may in turn invest in the obligations of automobile purchasers or dealers. There is, so to speak, a network of interconnected lakes and streams in the topography of the capital market.

Each financial intermediary issues its own specific brand of obligation. Commercial banks, for example, assume liabilities for deposits; trust companies assume liabilities for deposits and investment trust certificates; life insurance companies issue life contingency contracts; loan and finance companies issue notes and debentures; investment funds issue shares and debentures; and so forth.

The obligations issued by intermediaries differ very widely in the degree of their transferability. Thus (some classes of) deposits at commercial banks are so highly transferable (by the use of cheques) that we usually refer to them as money, and indeed they comprise the bulk of the money supply as it is ordinarily reckoned. On the other hand, life insurance policies are not at all transferable. Deposits with trust companies are transferable, but there is no market in their guaranteed certificates. There is a limited market in the notes and debentures of loan and finance

* Chart referred to in this chapter appears on p. 385.

companies; the market is limited in that the range of potential buyers is restricted, and the amount of trading among them is by no means as brisk as the trading now is in treasury bills for example. There is virtually no market in the shares of mutual companies, while the shares of most closed-end companies are listed on a recognized stock exchange. The lack of transferability of the liabilities of some intermediaries facilitates the tracing of the flows of funds through the economy (a minor advantage after all!) but it reduces the degree of sensitivity of savers to changes in the relative returns from financial assets.

With the development of the capital market, the financial institutions have grown and multiplied. The assets (or liabilities) of individual institutions have grown; as the degree of financial sophistication of firms, households and governments has advanced, new institutions have emerged to service their new needs. Government institutions have been created to supplement the flows of funds from private institutions to some sectors or to serve as an instrument of government policy in promoting directly the development of some kinds of economic activity. Changing relative preferences for the services offered by the various institutions are very important in determining their relative rates of growth. The institutions also differ in their investment practices and, accordingly, changing demands for the services of institutions will be reflected in changing relative demands for various financial assets by the institutional sector of the economy.

The assets of life insurance companies, instalment finance companies, investment companies, credit unions and government financial institutions have in the last three decades grown more rapidly than the assets of the banking system, trust companies and non-life insurance companies.[1]

The importance of the financial intermediaries in the Canadian capital market is manifest. The financial institutions, and in particular the banks, supply and manage the stock of money. In our discussion of consumers we noted (see Table 5.2) that of the net increase in financial assets in this sector over the years 1946 to 1954, some 52 percent was invested in currency and deposits, insurance and pensions. The percentage would be somewhat higher if the bonds and stocks of financial institutions were separated from the category "other bonds and stocks" and included with investments in financial institutions. On the other side of the account, instalment credit, bank loans and other loans extended by financial intermediaries may have amounted to some 8 or 9 percent of the same total. We know that financial institutions supply a substantial proportion of the funds obtained externally by businesses. In the financing of construction through mortgages the intermediaries are very important. In

1 We do not have comprehensive figures in Canada on which to base this sentence; it is based on a consideration of such Canadian figures as there are, and on a general comparison with experience in the United States as described in Raymond W. Goldsmith, *The Share of Financial Intermediaries in National Wealth and National Assets, 1900-1949*, Occasional Paper No. 42 of the National Bureau of Economic Research (1954) and in Raymond W. Goldsmith, *Financial Intermediaries in the American Economy since 1900*, National Bureau of Economic Research, (Princeton, 1958).

the mortgage category of the National Transactions Accounts it is estimated that of the net increase in mortgages outstanding in the years 1946 to 1954 the banks, life insurance companies and "other financial institutions"[2] absorbed 57.5 percent. In discussing the financing of agriculture we noted that while the role of private intermediaries in supplying long-term funds had diminished, the role of government institutions had grown accordingly; we also remarked that the banks are virtually the sole source of intermediate credit and a very important source of short-term funds. In financing small business generally, the banks remain very important as suppliers of short and medium term funds and the Industrial Development Bank, though small, is increasing the amount of long-term accommodation it supplies to small businesses in a rather wide field of activities. The institutions contribute to the financing of larger non-agricultural business much more through investments in corporate bonds and notes than in corporate stocks,[3] but their contribution is nevertheless large. It has been asserted that "typically, Canadian life companies take about one-third of the total corporate bonds issued".[4] All the intermediaries in Canada together must therefore take between two-fifths and a half of the value of all corporate bonds issued.

The financial institutions are important suppliers of funds to governments. If the holdings of the Bank of Canada are included, financial intermediaries hold roughly 45 percent of the direct and guaranteed debt of the Government of Canada. Of the provincial bonds outstanding at the end of 1954 intermediaries probably held a little over one-fifth. Of the municipal bonds outstanding at the end of 1954, the institutions probably held approximately one-third.[5]

While it is possible to indicate the very considerable part played by the intermediaries with facts and figures of the kind just offered, one would wish to offer a more comprehensive quantitative portrayal of their changing importance. In principle this can be done but there are pitfalls to be avoided. It may be helpful to sketch out in a very few paragraphs some of the problems and possibilities. These paragraphs will also serve to introduce a brief reference to recent American research on the financial institutions with which we shall close this general commentary.

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2 Included in Sector VII of the accounts. It must be remembered that the estates trust and agency funds of trust companies are here included with the funds of non-financial sectors; in particular assets of trusteed pension funds are not included among the assets of financial institutions in the national transactions accounts. Unless the contrary is explicitly stated in this chapter, financial intermediaries and their assets are to be understood as intermediaries and their assets included in sectors V, VI, and VII of the N.T.A.

3 This statement though correct in general is not true of all financial intermediaries. For example, investment companies invest more heavily in corporation stock than in corporation bonds.

4 Wm. C. Hood and O. W. Main, "The Role of the Canadian Life Insurance Companies in the Post-War Capital Market", *The Canadian Journal of Economics and Political Science*, November 1956, p. 476.

5 The estimate for Government of Canada bonds is derived from the *Statistical Summary* of the Bank of Canada for October 1957, pages 325 and 333. The proportions are 47 percent, 45 percent and 42.5 percent for 1954, 1955 and 1956 respectively. The estimates for provincial and municipal government bonds are based on figures for the institutions on the work sheets underlying the N. T. Accounts and on the totals of the amounts outstanding given in the *Statistical Summary* of the Bank of Canada, January 1955, p. 12.

The National Transactions Accounts record, as financial transactions for each sector, the net increases in assets and the net increases in liabilities in each of several categories of financial items, insofar as technical difficulties and available data will allow. For each sector the difference between the total of these net increases in assets and the total of the net increases in liabilities equals the sector's net demand for or supply of funds. It would be agreeable if one could say what proportion of the net change in assets and in liabilities in each category and in each sector represented a net supply of funds to or net demand for funds from financial institutions (or better yet each of the separate classes of financial institutions). This however is an unattainable ideal. It is unattainable at least to the extent that financial assets which are liabilities of non-financial sectors are transferable. Let us illustrate. If a sector, say the non-financial corporations shows in a given year, a net increase in bank loans, then it is meaningful to say that with respect to this category of transactions, banks have supplied funds to the non-financial corporations. This is still meaningful if for example, the only other financial transactions in the economy in the year consisted of an equivalent reduction in bank loans by the consumer sector so that the total assets of intermediaries remained unchanged, and the surplus of the consumer sector precisely offset the deficit in the corporate sector. Now however, consider a case involving transferable liabilities of a non-financial sector. Think of an economy as divided into four sectors, consumers, business, government and banks. Suppose that in a given year consumers have a surplus of 100 and that business has a deficit of 100 on non-financial transactions, and that government has neither a surplus nor a deficit. Suppose that business meets its deficit by selling government securities and that consumers dispose of their surplus by increasing bank deposits. Banks, let us suppose, increase both their deposit liabilities and their holdings of government bonds each by 100. In this simple situation it is clear that what has happened is that consumers have financed business through the intermediaries; consumers, by supplying funds in the form of deposits to the intermediaries, have enabled the institutions in their turn to supply funds to business through the purchase of government securities from that sector. Now, if we had looked at the accounts of the banks, and, noticing an increase in their holdings of government securities of 100 had concluded that in this particular year the banks had contributed to the finance of government to this extent, we should have missed the point entirely. But this is a very simple example. Let us indicate how difficult it is in a world of transferable assets to assert the extent to which *any* sector contributes to the finance of another sector. The illustration is summarized in the table. If the flows of funds as we record them in the N. T. Accounts were, in a given year as shown, we would know that there was a net supply of government securities to the market of 50, representing new issue by government and 120 representing sale of outstanding securities by business; we would

also know that there was a net demand made up of 70 by banks and 100 by consumers. If we were to assert that financial institutions contributed to the finance of government to the extent of 70 by purchasing government securities we would clearly be wrong, just as if we asserted that consumers contributed to the finance of government to the extent of 100. In fact, unless we know of some direct channels between the sectors such as for example, that the new issue of 50 by the government consisted of savings bonds or special non-transferable banking issues, perhaps deposit certificates, we cannot in this illustration say in what proportions the banks and consumers shared in the financing of each of the business and the government sectors. Indeed it is not even possible to state to what extent consumers and banks shared in financing the *total* of the deficits of the government and business sectors.[6] In fact it is difficult to summarize the transactions involving the intermediaries beyond the summary indicated by the table itself. The table does of course provide useful information about the participation of the banking sector in the flows of funds *among* the sectors of the economy and the information is already in summary form to a degree, since each category is a collection of assets, each sector is a collection of transactions and only net changes in assets and net changes in liabilities are recorded. (One can think of reasons for wanting the information in considerably greater detail.) In short, the National Transactions Accounts are a helpful way of indicating the participation of the financial intermediaries in the transfer of funds from surplus to deficit sectors; however, because one cannot track the precise routes taken by certain transferable assets, it is not possible to state the extent to which any individual sector (and in particular the financial sector) contributes to the financing of any other sector, or of all deficit sectors together.[7]

Categories	Consumers		Business		Government		Banks		Total	
	Dr.	Cr.	Dr.	Cr	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Surplus or deficit.....	—	150	—	—100	—	—50	—	0	—	0
Deposits....	50	—	20	—	—	—	—	70	70	70
Government securities..	100	—	—120	—	—	50	70	—	50	50
Total.....	150	150	—100	—100	0	0	70	70	120	120

6 From some points of view it might be desirable to ignore the intermediaries and contend that consumers supplied the funds to finance the total deficit. But while this interpretation of the data might serve some purposes it is not very helpful in indicating the role of the intermediaries!

7 One might think that even if over shorter periods we cannot measure the extent to which Sector A finances Sector B by the degree to which A acquires the obligations of B, perhaps over longer periods this method of measurement would be more meaningful. There are pitfalls here, but of a slightly different kind. It is true that over 50 years the short-run movements of assets cancel out to a degree, and one can observe in sharper relief the underlying trends in finance. The pitfalls here pertain to the interpretation of differences in the rates of growth of the financial assets and liabilities of the different sectors. But we must not develop this theory here. Suffice it to say that if over the long run the rate of increase of all financial assets, which are the liabilities of non-financial sectors, in the portfolios of the institutions exceeds the rate of increase of all such assets in the portfolios of non-financial sectors, we may regard this as evidence of an increasing degree of participation by the institutions in the financing of deficit sectors.

If balance sheets for all sectors were available with the assets and liabilities suitably classified it would be possible in principle to point out that as of the date of the balance sheets, Sector A held x percent of the financial liabilities of Sector B. One could observe, that is to say, the distribution by sectors of the liabilities of any sector. In particular one could assert what percentages of the liabilities of each sector were held by the financial institutions. This type of information (fragments of which we offered above) casts light on the importance of the institutions, though of course it is light of a rather different kind than that cast by the information on the flows of funds. The relation between the two sets of information is that conceptually the flows of funds recorded for each sector in a period are the differences, category by category, in its financial assets and liabilities as shown by its balance sheets pertaining to the beginning and end of the period.[8] It is unfortunate that we have not yet been able to develop balance sheets for most of the sectors delineated in the N. T. Accounts.

A recent American study,[9] published just before the first draft of this present chapter was written, attempts to portray the changing role of financial intermediaries in the United States economy since the turn of the century by drawing on the information contained in balance sheets of various sectors and in statements of sources and uses of funds for the sectors. We shall conclude this general statement with a brief commentary on this important pioneering work.

Dr. Goldsmith describes the proliferation in the number and kinds of intermediaries, and the changes in their geographical distribution. He traces the rate of growth of their assets and indicates differences among intermediaries in their rates of growth. He shows that the intermediaries have increased the proportion of the national total of "intangible assets" (the aggregate of all claims and business equities) which they hold, from a quarter in 1900 to two-fifths in 1949.[10]

Balance sheets for all intermediaries[11] and for smaller groups of intermediaries are shown in considerable detail for nine bench-mark dates beginning with 1900 and ending with 1952. Among the most important changes shown in the assets of the institutions are the rising trend in the proportion of assets comprised of federal government bonds and the declining trends in the proportions comprised of short-term business debts and debts of agricultural enterprises.

There is also a considerable amount of information shown on the proportions of outstanding financial liabilities of various non-financial sectors

8 That is, apart from valuation adjustments.

9 Raymond W. Goldsmith, *Financial Intermediaries in the American Economy since 1900*, National Bureau of Economic Research, (Princeton, 1958).

10 *Ibid*, Table 96, p. 321.

11 Financial intermediaries covered are the banking system, personal trust departments, private and government insurance organizations, savings and loan associations, credit unions, sales and personal finance companies, land banks, investment companies, investment bankers and government lending institutions.

held by the intermediaries. A selection of this information is shown below in Table 7.1. Further detail is shown in the book for seven other benchmark dates and for each of thirteen groups of institutions. It will be noted that the proportions are uniformly higher for 1952 than for 1900, though examination of the detail shows that the 1952 figures are not in all cases the highest for all years shown.

Table 7.1

PROPORTIONS OF SELECTED FINANCIAL LIABILITIES HELD BY INTERMEDIARIES, 1900 AND 1952, UNITED STATES[a]

	1900 %	1952 %
Non farm residential mortgages[b]	67	90
Non real estate debt of non-farm households[c]	43	46
Farm mortgages[d]	31	60
Domestic corporate bonds[e]	35	94
Domestic corporate stock[f]	8	21
State and local government securities[g]	60	79
Federal government direct and guaranteed securities[h]	54	70

a Raymond W. Goldsmith *Financial Intermediaries in the American Economy since 1900, op. cit.* Figures have been rounded to whole percentage points.
b *Ibid.*, Table 49, p. 195.
c *Ibid.*, Table 50, p. 200; the 46 percent pertains to 1949.
d *Ibid.*, Table 52, p. 210.
e *Ibid.*, Table 54, p. 224.
f *Ibid.*, Table 55, p. 225.
g *Ibid.*, Table 75, p. 262.
h *Ibid.*, Table 77, p. 269.

All of this information on numbers and kinds of intermediaries, the growth in their assets, the distributions of their assets and the proportions they hold of outstanding obligations of various kinds is very helpful in portraying the changing importance of the financial institutions in the United States. One attempt at indicating the role of these institutions, which occupies a considerable part of the volume, seems most unfortunate however. This is the attempt to show the proportions of gross, net and external sources of funds of each of the non-financial sectors of the economy contributed by the financial intermediaries. "In the absence of better figures, the funds supplied by financial intermediaries are measured as the change in their holdings of claims against, and securities of the various groups".[12] We have argued above that, since many of the liabilities of the non-financial sectors are transferable, this attempt is doomed to failure. We have allowed that subject to considerations pertaining to differences in rates of growth among sectors and among intermediaries, the change over long intervals of say two or three decades, in institutional holdings of the liabilities of a sector may be taken as indication of the contribution of the

12 *Ibid.*, Chapter 7, footnote 1, p. 180.

institutions to the financing of that sector. But the author, though he carefully stresses various weaknesses of the data, does not stress or even explain the problems of interpretation arising from differential rates of growth when he makes long-period comparisons. What in our opinion is worse, however, is that he makes short-period comparisons. One can find in the text measures of the amount and share of sources of funds of non-farm households, agriculture, unincorporated business, non-financial corporations, state and local governments, and the federal government, for the years 1901 to 1912, 1913 to 1922, 1923 to 1929, 1930 to 1933, 1934 to 1939, 1940 to 1945 and 1946 to 1949, supplied by financial intermediaries.[13] It is not meaningless to indicate the increases in the holdings by intermediaries of claims against and securities of various sectors over such intervals; to the extent that these claims and securities are transferable however it is meaningless to refer to the increases in holdings as a contribution of funds to the sector whose liabilities they are.

We have felt it necessary to offer this criticism as otherwise readers might wonder why we did not make similar use of the material in our National Transactions Accounts and compare the results with those in Dr. Goldsmith's study. We would repeat our opinion that much of the material in his study is exceedingly valuable.

In this chapter we shall review the activities of several classes of financial intermediaries. We shall start with the trust companies and consider briefly the nature of their business, and the classes of assets they hold. We shall review the legislation governing their investments and other regulators of the flows of their funds. Investment companies will be considered next. Though the sum of their assets is as yet small in relation to the total assets of the other groups of intermediaries discussed here, it is increasing rapidly and on this account above these companies are deserving of attention.

Life insurance companies will be given the most extended treatment. They are of course exceedingly important intermediaries. We shall review the trends in the kinds and value of contracts written by these companies, the changing distribution of their assets, the regulators of the flows of their funds, and comment particularly on the implications for their investment policies of the very rapid growth in new business which they have enjoyed.

Pension funds are invested with trust companies, investment companies and life insurance companies as well as other institutions or parties. They have become very large accumulations of capital funds in recent years and continue to grow at an enormous rate. Their very bulk and rate of growth raise many problems; we shall concern ourselves only with some of the principles and problems of investing these funds. This discussion will serve

13 They are all summarized in Table 89, pp. 298-9.

at least to draw attention to the need for more current information about the investments of these funds.

B. Trust Companies

1. *A factual review*[14]

There are in Canada just over 50 trust companies operating through about 175 branch offices. Of these companies ten are chartered under acts of the Parliament of Canada, the rest are chartered by provincial acts. The federally chartered companies held slightly over 15 percent of the total assets under administration by Canadian trust companies.

Federally incorporated trust companies operate in individual provinces under a system of licensing or registration required by the legislation of the provinces. Similarly provincially incorporated companies may operate in a province other than that of its incorporation by satisfying the registration requirements of that other province. Federal companies and provincial companies can exercise in a particular province only such of their corporate powers as are permitted to trust companies incorporated by that particular province.

The services rendered by trust companies are manifold; among them are the following : they receive property granted to them by persons, corporations or courts upon any trusts not contrary to law; they hold property for safe keeping, they act as agents in managing property and collecting the income therefrom, they act as corporation agents and in particular as transfer agents for corporation securities; they act as executors, administrators, receivers, liquidators, custodians and the like and as agents for such officers. Their funds are raised through the issue of capital stock, by accepting deposits and by accepting other funds for guaranteed investment. The companies are not allowed to issue bonds or debentures in most jurisdictions. We shall be particularly concerned with the investment practices of the trust companies.

(a) The funds under administration by trust companies

At the end of 1956, trust companies in Canada had funds under administration amounting to just under $6 billion. This figure may be compared with the total assets of Canadian life insurance companies and assets in Canada of foreign life companies of $8.2 billion. The assets of Canadian chartered banks at the end of 1956 were $13.4 billion. At the end of 1946 assets under administration by the trust companies totalled $3.5 billion. Thus in the post-war decade ending in December 1956 trust company assets increased by some 70 percent or at an average annual compound rate of slightly less than 5½ percent.

14 The writer wishes to acknowledge that the Dominion Mortgage and Investments Association very kindly prepared a "file memorandum" on Canadian trust companies at the Commission's request. This was in the nature of a data paper which has been of material assistance in preparing this factual review. Except where specific acknowledgment of sources is made, this writer accepts responsibility for the facts and interpretations in the text.

It is convenient to group the assets held by the trust companies into three classes: assets held in connection with the administration of estates, trusts and agencies; guaranteed funds and company funds. The division of funds into these three groups in 1946 and in 1956 is shown in Table 7.2.

Table 7.2

FUNDS UNDER ADMINISTRATION BY TRUST COMPANIES IN CANADA

(as at December 31st)

	1946		1956	
	Millions of Dollars	%	Millions of Dollars	%
Company Funds	89.0	2.6	128.1	2.2
Guaranteed Funds	216.4	6.3	616.1	10.5
Sub-Total	305.4	8.8	744.2	12.7
Estates, Trusts and Agency Funds	3,150.9	91.2	5,134.2	87.3
Total	3,456.3	100.0	5,878.4	100.0

It will be seen that estates, trusts and agency funds are by far the largest block of funds held, amounting to some 87 percent of total assets under administration at the end of 1956. Guaranteed funds consist of deposits and guaranteed trust certificates. Holders of deposit accounts with the companies are permitted to write cheques against their deposits. Guaranteed trust certificates are evidences of debt issued by the company; they are offered in maturities of from one to five years usually. In respect of these guaranteed funds a trust company is required to set aside and earmark cash and eligible securities equal to the aggregate amount of such funds (this is the sense in which these funds are "guaranteed"). In some jurisdictions, trust companies are required to maintain a liquid reserve in cash or specified securities of at least 20 percent of guaranteed deposits. Federally incorporated trust companies are limited in the amount of guaranteed funds they can hold; these funds must not exceed 10 percent of unimpaired capital and reserve. Guaranteed funds of trust companies in Canada amounted to some 10.5 percent of funds under administration at the end of 1956. About 40 percent of the guaranteed funds were in the form of deposits. The remaining block of funds (company funds) comprising just over 2 percent of total funds consists of retained earnings, the proceeds of stock issues and in some cases funds borrowed from banks. Company funds are now a somewhat smaller proportion of assets under administration than they were in the late twenties for example, while guaranteed funds are a slightly larger proportion. In 1928 guaranteed funds were 8.2 percent, and company funds 3.5 percent of all assets under administration.

(b) The assets of trust companies — company and guaranteed funds

Although company and guaranteed funds comprise only some 13 percent of the assets administered by trust companies, it is only for this block of assets that we have any detailed information concerning the investments into which these funds have flowed. There is no information available on the breakdown of the investments of estates, trusts and agency funds. In Table 7.3 the investments made with company and guaranteed funds of the trust companies registered in the Province of Ontario are shown for selected years from 1928 to 1956. In 1956 the company and guaranteed funds administered by this group of companies comprised 93 percent of the total of such funds for all companies in Canada.[15]

It will be noted that, considering 1955 and 1956 together, approximately one-half of these assets of trust companies are invested in bonds, one-third in mortgages and about 3.5 percent in stocks. Comparing the distribution for these years with that for 1946 at the end of the war, one notices the considerable decline in the importance of federal government (and United Kingdom government) bonds from 44 percent of assets to under one-fifth and a considerable increase in the importance of provincial, municipal and other bonds and of mortgages. Comparing the 1956 distribution with that for 1928, one notices the very considerable increase in the importance of bonds in the portfolios, rising from 16 percent to 46 percent and the decline in mortgages and collateral loans in the portfolios. The proportion of stocks in the portfolios at 3.6 percent in 1956 is rather more than double what it was in 1928.

The reader who wishes to examine the annual flows of company and guaranteed funds to the companies and from them into various classes of financial assets, may consult the National Transactions Accounts for the Trust Companies Subsector given in Part VI.

2. *The Regulators of the Flows of Funds*

(a) Legislation governing investment policy

The legislation governing investment policies of trust companies is detailed and is not the same in all jurisdictions. We shall attempt here to give only a synopsis of the Ontario legislation.[16] Brief references will be made to the federal legislation[17] and to the Nova Scotia legislation. Investment of guaranteed and company funds will be considered first.

15 A breakdown of the assets held against company and guaranteed funds for the federally incorporated companies and companies registered in Nova Scotia, New Brunswick and Manitoba may be found in the *Annual Report of the Superintendent of Insurance for Canada, Loan and Trust Companies for the year ended 1956*. A similar breakdown for the companies which are members of the Dominion Mortgage and Investments Associaton may be found in the annual reports of that association.

16 The relevant legislation is: (i) The Loan and Trust Companies Act, Revised Statutes of Ontario, 1950, C. 214 and (ii) The Trustee Act, Revised Statutes of Ontario, 1950, C. 400.

17 Especially, An Act Respecting Trust Companies, Revised Statutes of Canada, 1952, C. 272.

Table 7.3

PERCENTAGE DISTRIBUTION OF THE ASSETS OF TRUST COMPANIES REGISTERED IN ONTARIO, COMPANY AND GUARANTEED FUNDS

End of Year	Bonds and Debentures					Mortgage Loans	Collateral Loans	Stocks	Cash	Other	Total	Total Assets ($ million)
	Dominion and U.K. Govt.	Provincial Govt.	Municipal Govt.	Other	Total							
1928......	6.1	1.4	5.3	3.9	16.7	47.9	24.9	1.7	3.2	5.6	100.0	167.5
1933......	9.2	2.6	7.2	4.4	23.4	48.7	11.7	2.3	4.0	9.9	100.0	186.7
1939......	13.7	3.7	5.0	7.9	30.3	40.5	10.6	3.7	5.3	9.6	100.0	204.2
1946......	44.0	5.4	3.7	6.5	59.6	23.3	5.1	3.7	4.9	3.4	100.0	268.4
1950......	36.8	9.9	5.3	7.9	59.9	26.2	3.7	2.2	5.1	2.9	100.0	392.4
1951......	32.3	9.4	5.9	8.6	56.1	28.6	4.9	2.5	4.7	3.2	100.0	412.3
1952......	28.7	9.6	6.2	8.2	52.7	29.2	4.7	3.6	6.8	3.0	100.0	431.7
1953......	27.7	10.1	6.3	8.0	52.1	31.5	4.2	3.3	5.3	3.7	100.0	438.7
1954......	27.6	11.5	6.4	10.8	56.3	28.2	5.3	2.6	5.0	2.6	100.0	586.1
1955......	22.2	13.2	6.5	10.4	52.3	32.1	5.2	3.4	4.6	2.4	100.0	665.1
1956......	18.4	10.1	5.6	12.1	46.3	36.7	4.6	3.6	6.1	2.7	100.0	692.3

SOURCE: Annual Reports of the Registrar of Loan and Trust Corporations, Ontario.

(i) Investment of company and guaranteed funds

In the Ontario legislation the provisions covering the investment of guaranteed funds differ only in one major respect from those covering the investment of company funds and we may therefore conveniently consider them together. At least 50 percent of guaranteed funds must be invested in a restricted class of securities cited as eligible for the investment of trust funds in the Trustee Act; there is no such restriction on the investment of company funds. The Trustee Act allows the investment of trust funds in the securities of or guaranteed by the governments of Canada and its provinces, the Government of the United Kingdom, and the municipalities of Ontario. It also permits investment of trust funds in bonds of municipalities in other parts of Canada and bonds secured by municipal taxes. Investment in first mortgages on real estate in Canada, debentures of loan companies and guaranteed investment certificates of trust companies is also permitted under the Trustee Act.[18]

Company and guaranteed funds may also be invested in several classes of assets in addition to the rather limited group allowed under the Trustee Act. These funds may be invested in government securities of foreign countries or their states (if these governments have met their interest obligations for the past ten years). The funds may be invested in bonds or preferred stocks of Canadian corporations, if the company has paid dividends on its preferred or its common stock in each of the last five years. Common stocks of Canadian companies are also eligible provided that dividends have been paid at a specified rate in each of the preceding seven years. A trust company may not invest company and guaranteed funds in any one corporation or company, by whatever means, to a total amount in excess of 15 percent of the trust company's paid-in capital stock and reserve funds. Moreover, a trust company may not hold more than 15 percent of the stock or more than 15 percent of the bonds of any one corporation or company.[19] The companies are allowed to make collateral loans subject to certain restrictions. They are also allowed to invest in real estate for the production of income though there are several restrictions on this type of investment. In the first place, the total investment in real

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18 Mention must be made of the very important development in the legislation governing the investment powers of trustees in Canada embodied in Nova Scotia legislation of 1957 pertaining to trustees in that province. (Statutes of Nova Scotia, 1957, 6 Eliz. II, Chapter 54). By this legislation, amending The Trustee Act (Revised Statutes of Nova Scotia, 1954, Chapter 300) a trustee may, unless expressly forbidden by the instrument creating the trust (if any), invest any trust funds in his hands, whether already invested or not, in preferred and common stocks of Canadian corporations, subject to certain conditions. The conditions are as follows. For a corporation's preferred shares to be eligible as trustee investments, that corporation must have paid dividends on its preferred shares at least at the specified rate and have paid dividends on its common shares at a rate stipulated in the Act in each of the five preceding years. For a corporation's common shares to be eligible as trustee investments, that corporation must have paid dividends on its common shares at a stipulated rate for the last seven years. Not more than 30 percent of the common stock nor more than 30 percent of the issued shares shall be purchased for any trust. No purchases of shares may be made for any trust that would raise the aggregate value of shares, preferred and common, above 30 percent of the value of that trust and similarly no purchases of common shares may be made that would raise the value of common shares held for a trust above 15 percent of the value of a trust. Market values are to be used in valuing holdings but no liquidation of any assets is to be required solely because of changes in the ratio of the market values of investments and the market value of an entire trust.

19 In the federal legislation, investment in common stocks is limited to 15 percent of the guaranteed funds of the company and 15 percent of the company's own funds, and not more than 30 percent of the common stocks or of all stocks of any one corporation may be held.

estate for income purposes is limited to 5 percent of the guaranteed funds and 25 percent of unimpaired capital and reserve. Secondly, the amount invested in any one parcel is limited to one-half of one percent of the total value of guaranteed and company funds. Finally such investment in real estate must be in the form of a lease made to or guaranteed by a company which has paid dividends on its preferred or common shares at a specified rate over each of the preceding five years and if the lease provides for reasonable income and the repayment of at least 85 percent of the principal within 30 years.

Thus in general the legislation permits unlimited investment in most classes of securities issued or guaranteed by governments in Canada; and in first mortgages on real estate in Canada.[20] Investment in other securities is permitted subject to certain eligibility requirements and there is a limit imposed on the total investment in common stocks and on the total investment in the stocks of any one company or the obligations of any one company. Investment in real estate as an earning asset is limited as to total amount and as to the amount which may be made in any one parcel.

(ii) Investment of estates, trusts and agency funds

The types of investment which may be made with estate, trust or agency moneys is governed by the terms of the instrument creating the relationship in each case. Where the funds involved are those of an estate or other trust and the instrument is silent as to investment powers or discretion is given, the investment is limited to those types of investment which are permitted under the Trustee Act of the province in which the estate or trust is being administered. We have already reviewed the classes of investment permitted under the Trustee Act of the Province of Ontario. We should note that even though certain investments are eligible investments under the Trustee Act the trust company is expected to conduct itself as would a "prudent man" since the Act stipulates that an investment may be made "only if the investment is in other respects reasonable and proper".

In considering statutory provisions governing the investment of estates, trusts and agency funds mention must be made of provisions in some of the acts (including the federal and Ontario acts) for the establishment of common trust funds.[21] In the Ontario Act a common trust fund is defined as "a fund maintained by a trust company in which moneys belonging to various estates and trusts in its care are combined for the purpose of facilitating investment".[22] The Act further specifies that "notwithstanding this or any other act any provincial trust company or any other registered trust company that has the capacity to do so may, unless

20 The federal legislation requires that mortgage loans, except those insured under the National Housing Act, shall be limited to 60 percent of the appraised value of the property.

21 Mention will be made below of other devices for pooling trust moneys in the discussion of pension funds.

22 R.S.O., 1950, C. 214 s. 76 (1).

the trust instrument otherwise directs, invest trust money in one or more common trust funds of the company . . ."[23] These provisions are potentially very important in enabling trust companies to combine small blocks of trust funds for investment purposes, and to secure the advantages of diversification. As far as this writer has been able to determine the first such fund in Canada was established in 1952. Since then several have been introduced. We shall summarize briefly the regulations governing their operation in Ontario.[24]

In order to establish a common trust fund a minimum of $200 thousand must be placed in the fund and a plan of operation of the fund be approved by the Ontario registrar of loan and trust companies. No estate or trust is allowed to have an interest of more than $100 thousand (raised from $50 thousand in 1956) in all the funds of a trust company or in any one fund, of more than 10 percent of the book value of that fund. There are restrictions on the investments of the common trust funds. Thus not more than 25 percent of the value of any one fund is to be invested in mortgages. At least 40 percent of the assets of a fund must be in the form of cash or "readily marketable securities". The total number of shares held by a fund in any one class of shares of stock of any one corporation is not to exceed 5 percent of the number of such shares outstanding, and if the company maintains more than one fund the aggregate investment in such shares is also to be so restricted. The total investment of a fund in all obligations of or guaranteed by any one party (except the governments of Canada and its provinces) must not exceed 5 percent of the value of the fund. The investment of a fund in guaranteed investment certificates of a trust company, in debentures of a loan company, or bonds issued or guaranteed by a municipal corporation is not in each of these cases to exceed 10 percent of the value of the fund.

Common trust funds have a rather longer history in the United States than in Canada. They began to flourish after changes in the income tax legislation in 1937 exempted the funds themselves from taxation. At the end of 1956 there were some 243 such funds in the United States operated by 195 institutions. Total assets in the funds amounted to just under $2 billion representing investments of some 93 thousand fiduciary accounts. Approximately 50 percent of the assets were in common stocks, 11 percent in preferred stocks, 16 percent in domestic government bonds, 20 percent in domestic corporate bonds and one percent in real estate loans.[25]

(b) Other regulators of the flows of funds

We have reviewed the statutory regulations governing the investment of funds administered by trust companies. Other regulators include

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23 R.S.O., 1950, C. 214 s. 76 (2). In the federal Trust Companies Act, R.S.C., 1952, C. 272, permission to invest trust moneys in common trust funds is contained in section 66 (3).

24 These are Ontario Regulations 84/51 as amended by Ontario Regulations 47/56 as promulgated under authority of R.S.O., 1950, C. 214 s. 76 (3).

25 See "Survey of Common Trust Funds, 1956", *Federal Reserve Bulletin*, June 1957, pp. 622-627.

the terms of trust instruments, the conventions of trust companies and the relative prices of financial assets. We shall comment very briefly on each of these.

The terms of trust instruments vary widely. In some cases, the trust company has no alternative but to invest in securities permitted under the Trustee Act. In many other cases the trust instrument will grant authority to invest in securities eligible as life insurance company assets. There is a tendency encouraged by the trust companies to draw wills and other trust instruments so as to give considerably more authority and discretion to the trust companies and within limits moves in this direction are in the interests of the investor, of the company, and of the proper functioning of the capital market as a whole. A considerable and increasing portion of moneys under administration by trust companies are in the nature of pension funds. We shall refer particularly to pension funds in Part E of this chapter.

The business of a trust company is so varied and the purposes for which funds under administration are being held are so diversified that it is difficult if not impossible to generalize about conventional practices of trust companies as they impinge on the functioning of the capital market. Trust company investors are conservative investors and to a very large degree they should be. The conservatism in many instances is but a reflection of that of the trustors who have granted the trusts and imposed the conditions under which the trust companies must act. The efforts of the companies to encourage those entrusting their funds to them to grant wider discretionary powers, when this is reasonable, are likely to result in greater sensitivity to changing yield differentials among a wider class of assets. Similarly the development of common trust funds now being pioneered by some companies in Canada should result not only in a lowering of the costs of administration of small trust accounts but a broadening of the classes of assets held. The exercise of wider discretionary powers and the use of the device of the common fund will contribute in some degree to a reduction of the compartmentalization of the capital market.

Since there is no public information on the distribution of the investments of estates, trusts and agency funds it is impossible to indicate the effects of changing yield differentials on the portfolios held by these funds. With respect to the company and guaranteed funds, which after all, are a rather small proportion of the total funds under administration it would be difficult to deny that, within the restrictions imposed by legislation, and the need for diversity, the composition of the portfolios of these funds has reflected the differential changes in the yields of assets. Certainly since the war, the proportion of government bonds has declined as higher yielding mortgages and junior government bonds have been substituted for them. The investment in corporate stocks remains substantially below the amounts permitted by law, on the other hand, the valuation requirements of the

legislation and the short-term character of the funds particularly the guaranteed funds militate against investment in stocks.[26]

C. *Investment Companies*

1. *A Factual Review*[27]

(a) General description of the companies

The financial intermediaries which we shall consider under the somewhat ambiguous heading of "investment companies" include: (a) companies which sell savings certificates to the public and invest the proceeds in financial assets to yield a specified sum in the future to each certificate holder; (b) so-called "mutual funds" which stand ready at all times to sell shares to the public and which invest the proceeds for the benefit of the shareholders who may sell their shares back to the company on agreed terms; and (c) investment funds, often called "investment trusts" which from time to time sell shares and possibly bonds to the public and which invest the proceeds in financial assets for the benefit of the shareholders who may sell their shares on the open market. The securities of the investment trusts trade on the open market; these companies do not have new issues continuously "on tap" nor do they undertake to redeem their shares.

Investment companies as the term is used here are to be distinguished on the one hand from holding companies, the principal object of which is to hold a controlling interest in a variety of companies, and on the other hand from finance companies which specialize in providing instalment

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26 A very striking illustration of the difficulties imposed by trust deeds and business conventions on investment officers seeking to respond to changing yield differentials in the market is cited in J. M. Macdonnell "The Trust Company and the Investor" in *Canadian Investment and Foreign Exchange Problems* (J. F. Parkinson, ed.) Toronto, 1940, pp. 177-8. This is the problem arising when under a will or trust document, one person is entitled to income and another person to capital. "This arises where the income is to be paid to one person during lifetime, or for some limited period, and upon the termination of this period the capital is to be paid to someone else. In such cases the first person is known as the life tenant and the second as the remainder man. There is a long-established general principle that in dealing with any situation which involves the interest of both life tenant and remainder man the trustee must hold the scales evenly - that is he must adopt a course which, having regard to the existing circumstances, is reasonably fair to both. There is another well-established general principle that a profit realized from the sale of an investment is an accretion to capital and conversely, if there is a loss capital must bear the loss.

"When a trustee has money in hand for investment and a life tenant and remainder man are concerned, he invests in bonds which give a certain yield depending upon the prevailing rates. It is very seldom that bonds can be purchased exactly at par and in most cases they are at a premium or a discount, depending upon the coupon rate of interest. When the investment is made, the trustee has in effect entered into an undertaking to give his life tenant the yield rate during the lifetime of the bond, and at maturity to have for the remainder man the exact amount of capital invested. This is done by amortization; that is, when a bond is bought at a discount, paying to the life tenant with each instalment of interest a proper proportion of the difference between the purchase price of the bond and the par value, and where the bond is bought at a premium, deducting from each instalment of interest a proper proportion to be credited to capital account. Quite often, owing to changes in the prevailing rate of interest, the bond purchased as indicated above increases in price and the trustee is approached by bond dealers suggesting a sale of the bond to take the profit and reinvestment in another bond bearing a lower coupon rate. In practically every case this is impossible owing to the application of the two general principles mentioned. The result would be that the profit would go entirely to the remainder man, and the life tenant would suffer. *Therefore, generally speaking, when an investment in a bond is made for a trust which involves a life tenant and remainder man, the only justification for the trustee selling before maturity is if some situation develops where in his judgment the security becomes doubtful*". (Italics ours.)

27 The writer has benefited from reading the unpublished Master of Arts dissertation prepared in 1954-5 by John W. L. Winder, then his student at the University of Toronto. This dissertation is entitled "Investment Companies in Canada since the Second World War."

credit. The investment companies are characterized by the diversity of their portfolios, whether they specialize in the holding of stocks or bonds, or whether they include stocks, bonds and perhaps mortgages in their portfolios. However, the very great variety of institutions to be found in the capital market makes any classification to some extent arbitrary.

Let us describe each of the principal classes of companies in a little more detail, considering those which sell savings certificates first. There are at least six Canadian companies whose principal business is the selling of savings certificates to the public.[28] Only one of these, Investors Syndicate of Canada Limited which is also the largest, raises company funds through the issue of shares which are traded on a national exchange.[29] These companies distribute investment (or savings) certificates to the public. Such certificates may be purchased by single payments or by periodic instalments over stated periods of time ranging from six to thirty years. The certificates guarantee a specified sum to the holder upon maturity. The companies derive all or part of their income from the excess of the earnings on investments of money derived from sale of stock and certificates over the earnings guaranteed in the certificate contracts. Some of these companies operate mutual funds and derive further earnings as management fees from these funds[30] or as commissions from the sale of shares in the funds. The companies engage sales forces to sell and distribute their certificates; Investors Syndicate of Canada in 1957 with 20 divisional sales offices and a staff of over 450 salesmen sold new certificates having a maturity value of $84 million to bring the total maturity value of outstanding certificate contracts up to $424 million at the end of the year. These certificates are held by some 106 thousand Canadians.[31]

Mutual funds or open-end investment companies are distinguished by the readiness of the company at all times to sell shares at a price equal to the net value per outstanding share of the investments held by the company at the time and by the willingness of the company at all times

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28 These six are: Investors Syndicate of Canada Limited, Champion Savings Corporation Limited, Savings and Investment Corporation, Western Canada Savings and Loan Corporation, Associated Investors, and First Investors Corporation. It is not claimed that this list is complete. (We should note that in the classification used in the National Transactions Accounts, these companies have not been included in the investment companies subsector. Investors Syndicate of Canada Limited and Western Canada Savings and Loan Corporation are included with the mortgage loan companies; no information was collected on the remaining companies.)

29 The shares were listed in 1957 on the Toronto Stock Exchange following a reorganization of company affairs by which control passed from Investors' Diversified Services Inc. of Minneapolis to Canadian interests.

30 Investors Syndicate of Canada operates Investors' Mutual of Canada, Limited, Investors Growth Fund of Canada Limited, as well as Investors Trust Company (incorporated in 1957) and registered retirement savings plans. Champion Savings Corporation Limited operates Champion Mutual Fund of Canada Limited (incorporated in 1955). Savings and Investment Corporation operates Savings and Investment Mutual Fund of Canada Limited (incorporated in 1956).

31 The figures quoted are derived from the *Annual Report of Investors Syndicate of Canada for 1957* and from a brochure about the company entitled *Defensive Equity with Growth Probabilities* distributed by Wisener and Company Limited and prepared in association with Andreae Cole and Company Limited.

to redeem its shares at a price equal to the then "break-up value" of the company per share. This last sentence needs to be qualified to the extent that companies usually price their shares either at a discount from break-up value when redeeming or at a premium over break-up value when selling them. It is more common to charge a premium (of perhaps 7 to 9 percent) when selling shares than to discount the shares when redeeming them. There were at least twenty-seven mutual funds operating in Canada at the end of 1957,[32] the number having grown from approximately three at the end of 1946.[33] Most mutual funds in Canada have no senior securities outstanding, and are therefore sometimes called non-leverage funds. At least three funds in Canada at the end of 1956—the first three in the list given in the previous footnote — did have senior securities outstanding. Leverage Fund of Canada, with total assets of $4.3 million had a bank loan of half a million dollars. The other two had preferred shares outstanding. The mutual funds display considerable variety in the attractions they offer to investors. Some are limited by their charters in the investments they may acquire — we shall discuss this briefly below. Some are accumulating funds and automatically apply dividends to the purchase of further shares in the fund for the shareholder.

The investment trusts, or closed-end investment companies issue shares from time to time, but do not redeem their shares as do the mutual funds. Shares in the closed-end investment companies may be bought and sold in the stock markets; the shares of some of the companies are listed on an exchange. There were at least 21 closed-end companies operating in Canada at the end of 1957 and all but three of these were also operating at the

32 We shall refer to the so-called non-resident investment companies—mutual funds—below.

33 The following are the names of the funds referred to in the text with their dates of incorporation in parentheses. It is almost certain that this list is incomplete.

1. Grouped Income Shares Limited (1951)
2. Leverage Fund of Canada Limited (1949)
3. Mission Investment Fund Limited (1951)
4. All-Canadian Compound Fund (1954)
5. All-Canadian Dividend Fund (1954)
6. Beaubran Corporation (1947)
7. Canadian Investment Fund Limited (1932)
8. Canadian Usafund Ltd. (1953)
9. Canafund Company Limited (1950)
10. Champion Mutual Fund of Canada Limited (1955)
11. Commonwealth International Corporation Limited (1933)
12. Corporate Investors Limited (1931)
13. Dominion Equity Investments Limited (1951)
14. Growth Mines & Metals Investment Fund of Canada Limited (1956)
15. Growth Oil & Gas Investment Fund of Canada Limited (1956)
16. Investors Growth Fund of Canada Limited (1957)
17. Investors Mutual of Canada Limited (1948)
18. Mutual Accumulating Fund (1949)
19. Mutual Income Fund (1951)
20. Mutual Bond Fund (1957)
21. Resources of Canada Investment Fund Limited (1950)
22. Savings and Investment Corporation Mutual Fund of Canada Limited (1956)
23. Supervised American Fund (1954)
24. Supervised Executive Funds (1955)
25. Supervised Growth Fund (1953)
26. Supervised Income Fund (1953)
27. Timed Investment Fund Limited (1950)

end of 1946.[34] It will be noted that the mutual funds are on the whole of more recent origin than the closed-end companies. In the United States too, the number and assets of mutual funds have each respectively grown more rapidly than the number and assets of closed-end companies. For several reasons, including unwise management in some cases, the closed-end companies fared badly in the stock market crash of 1929 and the subsequent period of depressed stock prices. During the post-war period marked until recently by generally rising stock prices, the mutual funds have been more popular.[35] It will also be noted that while most mutual funds are non-leverage funds, most closed-end companies are leverage companies in the sense that they have some securities senior to the common stock outstanding. Of the 21 companies cited in the previous footnote, the first six are non-leverage companies.[36]

Thus far we have referred only to investment companies which are incorporated in Canada and whose shares are held largely by residents of Canada. In addition to these companies there is a group of companies, very recently formed, which are incorporated in Canada and whose portfolios consist largely of Canadian securities but whose shares are owned largely by non-residents. There are at least eight of these so-called non-resident investment companies.[37] They have all been formed since May of

[34] The 21 companies referred to with the dates of their incorporation are as follows:

1. Canadian General Investments Limited (1930)
2. Economic Investment Trust Limited (1927)
3. Electra Investments (Canada) Limited (1954)
4. International Holdings Limited (1937)
5. Third Canadian General Investment Trust Limited (1928)
6. Toronto and London Investment Company Limited (1951)
7. Argus Corporation Limited (1945)
8. Canadian International Investment Trust Limited (1929)
9. Canadian Power and Paper Securities Limited (1952*)
10. Central Canada Investments Limited (1951)
11. Consolidated Diversified Standard Securities Limited (1932)
12. Debenture and Securities Corporation of Canada (1901)
13. Dominion and Anglo Investment Corporation Limited (1928)
14. Dominion Scottish Investments Limited (1929)
15. Great Britain and Canada Investment Corporation (1929)
16. Hydro Electric Securities Corporation (1926)
17. Investment Bond and Share Corporation (1927)
18. Investment Foundation Limited (1929)
19. London Canadian Investment Corporation (1928)
20. Pacific Atlantic Canadian Investment Company Limited (1937)
21. United Corporations Limited (1933)

* This company took over Canadian Power and Paper Investments Limited, incorporated in 1920.

[35] The stocks of closed-end companies, like those of many holding companies, commonly sell at a discount from net asset value per share; the shares of mutual funds are somewhat more liquid in that they always can be sold at net asset value per share or a figure having a fixed relationship to net asset value per share.

[36] In the United States, under regulations promulgated by the Securities and Exchange Commission mutual companies incorporated after 1940 may issue only common stock. They may secure a slight amount of leverage by borrowing limited amounts from banks. The reader interested in information concerning investment companies in the United States may wish to consult Arthur Wiesenberger, "Investment Companies", New York annual editions; Douglas H. Bellemore, "Investment Companies" in *American Financial Institutions* (Herbert V. Prochnow, ed.) New York, 1951, and "Hearings before the Committee on Banking Currency, United States Senate, 84th Congress, 1st Session on Factors Affecting the Buying and Selling of Equity Securities", evidence of Dorsey Richardson, Chairman, Executive Committee, National Association of Investment Companies, pp. 696-734.

[37] The companies referred to are:

1. Canada General Fund Limited
2. Canadian International Growth Fund Limited
3. Investors Group Canadian Fund Limited
4. Keystone Fund of Canada Limited
5. New York Capital Fund of Canada Limited
6. Scudder Fund of Canada Limited
7. Templeton Growth Fund of Canada Limited
8. United Funds Canada Limited.

1954. All are mutual funds and all are accumulating funds in the sense that they make no distribution of interest and dividends received from portfolio investments. These funds benefit from and in substantial degree their formation was motivated by certain technical differences in the tax laws of Canada and the United States which we shall describe below when discussing the regulators of the flows of funds.

(b) The assets of the investment companies

As of the end of 1956 the assets of the Canadian investment companies referred to above, resident and non-resident, totalled somewhat more than $1 billion. The assets of the resident companies were more than three-quarters of a billion dollars. The value of the Canadian securities in the portfolios of the non-resident companies exceeded $285 million.[38] In Table 7.4 the assets of the Canadian companies, with the exception of some for which figures were not given in the source consulted are grouped by class of company. It will be noted that as of the end of 1956, the assets of the mutual funds were approximately equal to those of the closed-end funds.[39] In the table the companies issuing investment certificates are represented only by those of the largest company in the group so that the total for this group is understated. The relative importance of the non-leverage companies among the mutual funds and of the leverage companies in the closed-end group is also apparent from the table.

The growth of the companies' assets in percentage terms, from 1946 to 1951, from 1951 to 1956 and from 1946 to 1956 is shown in Table 7.5. This table shows clearly the very rapid growth of the non-leverage mutual funds in the post-war decade. The closed-end funds have grown less rapidly than either the certificate company or the mutual funds. To a significant extent all the figures in the table reflect the increases in the prices of securities held in the portfolios as well as increases in the number of securities held.

(c) The portfolios of the investment companies

Most Canadian investment companies hold at least half of their investments in the form of common stocks; many hold more than two-thirds of their investments in this form, some hold over four-fifths in this form and one or two have less than one-tenth of their investments in securities other than common stocks.

The largest of the certificate companies invests predominantly in mortgages. At the end of 1957 three-quarters of the market value of cash and

38 The authority for this statement is the Balance of Payments Section of the International Trade Division of the Dominion Bureau of Statistics. "By the end of 1955 the aggregate investment in Canada of these (non-resident) funds exceeded $200 million". "Their holdings of Canadian Securities, mainly common stocks, rose in value during the year (1956) by some $85 million". The first quotation is from p. 4 of *Sales and Purchases of Securities between Canada and Other Countries, December 1955 and Review of Security Trading During 1955*. The second quotation is from p. 4 of *Sales and Purchases of Securities between Canada and Other Countries, December 1956, and Review of Security Trading During 1956*.

39 They may in fact have been somewhat larger inasmuch as the omitted companies were mutual companies.

Table 7.4

ASSETS OF CANADIAN RESIDENT INVESTMENT COMPANIES

(millions of dollars)

	1946	1951	1956
1. Investors Syndicate of Canada Limited	12.0	49.5	106.2
2. Open-end, non-leverage	15.8	92.8	304.6
3. Open-end, leverage	—	1.4	8.9
Total, open-end or mutual	15.8	94.2	313.5
4. Closed-end, non-leverage	37.2	50.0	100.6
5. Closed-end, leverage	94.8	123.3	220.4
Total, closed-end	132.0	173.3	321.0
Grand Total	159.8	317.0	740.7

NOTES: (a) Figures pertain to fiscal year ends nearest to the calendar year end.

(b) In reckoning assets, investments have been valued at current market prices in most cases.

(c) Of the open-end or mutual companies listed earlier, the following have not been included in the above table: Mission Investment Fund Limited, Champion Mutual Fund of Canada Limited, Investors' Growth Fund of Canada Limited, Savings and Investment Corporation Mutual Fund of Canada Limited, Mutual Bond Fund, Growth Mines and Metals Fund of Canada Limited, Growth Oil and Gas Investment Fund of Canada Limited, and the four Supervised Funds (Nos. 23-26 in the list).

SOURCES: The assets of Investors Syndicate of Canada Limited were taken from the company's annual report for 1957. All other information has been derived from the *Survey of Industrials 1957* and earlier publications in their series. The annual "Survey of Industrials" is published by The Financial Post, Toronto.

investments of Investors Syndicate of Canada Limited was held as mortgages, one-fifth consisted of securities, 3 percent was in the form of loans to certificate-holders and the remaining 2 percent was comprised of cash. Of the mortgages held, 54 percent represented National Housing Act loans. Of the total value of securities held, about one-half was contributed by bonds, two-fifths by preferred stock and one-tenth by common stock.[40]

We cannot present comprehensive asset distributions for the mutual and closed-end companies. Not all the companies publish information on the distribution of their assets, and those that do give such information do not give it in any standard form. We shall content ourselves therefore with a brief discussion of the portfolios of a few selected companies.

The largest of the resident mutual companies is Investors Mutual of Canada Limited.[41] As of the 31st of October, 1957, this company had two-thirds of its net assets in common stocks (valued at market prices), 15 percent in preferred stocks, 14 percent in corporate bonds and the remaining 5 percent in cash and government bonds. The common stocks portfolio was made up of stocks in 104 different companies, in a wide variety of activities, industrial, commercial, financial and service.

40 The figures cited are computed from information given in the annual report for the year 1957 of Investors Syndicate of Canada Limited.

41 The information cited is taken from the 1957 annual report of Investors Mutual of Canada Limited.

Table 7.5

PERCENTAGE INCREASES IN THE ASSETS OF CANADIAN RESIDENT INVESTMENT COMPANIES

	1946-51	1951-56	1946-56
1. Investors Syndicate of Canada Limited	313%	115%	785%
2. Open-end, non-leverage	487	228	1,828
3. Open-end, leverage	—	536	—
Total, open-end or mutual	496	233	1,884
4. Closed-end, non-leverage	34	101	170
5. Closed-end, leverage	30	79	133
Total, closed-end	31	85	143
Grand Total	98	134	364

SOURCE: Table 7.4.

The next largest resident mutual fund, Canadian Investment Fund, had an investment portfolio consisting of 71 percent common stocks, 5 percent preferred stocks, 16 percent Government of Canada Bonds and 7 percent cash.[42]

There is considerable diversity among the portfolios of the resident mutual companies. One fund[43] recently established will invest all of its assets in bonds, corporate and government. Another fund[44] had substantially less than 50 percent of its portfolio in common stock; it had 33 percent of its assets in common stock, 29 percent in preferred stock and 38 percent in cash and bonds at the end of 1956.

The largest of the closed-end companies is the Argus Corporation which is a specialized investment company which invests sizable amounts in a limited number of companies, and exercises effective control over some of these companies. For this reason it is rather unique among Canadian investment companies. The next largest is Canadian General Investments Limited, at the end of 1956 it held 87 percent of its portfolio in common stocks and another 11 percent in preferred stocks. The next two largest companies held 67 and 61 percent of their assets in common stocks at the end of 1956. There is again however, considerable diversity among these companies in respect of their portfolios.

The non-resident mutual funds also invest largely in common stocks. The two largest of these companies, Canada General Fund (1954) Limited and Scudder Fund of Canada Limited have typically invested well over 90 percent of their assets in common stocks. None of these funds invests in securities of United States corporations or other bodies, they thereby avoid liability to the United States government for taxes.

42 The information is taken from 1957 annual report of the company.
43 Mutual Bond Fund.
44 Timed Investment Fund Limited.

2. *The Regulators of the Flows of Funds*

(a) Legislation

(i) Income tax legislation

The income tax legislation in Canada gives special tax consideration to those investment companies which conform to specified requirements. Accordingly the Income Tax Act as we shall see affects to some degree the portfolios of these companies and hence the flow of their funds into the capital market. The non-resident investment companies were formed very largely to exploit provisions of the income tax legislation in both Canada and the United States. We shall review these two aspects of the effects of income tax legislation on investment companies and the flows of their funds.

An investment company in Canada is required to pay a tax of 20 percent of its taxable income. Dividends paid by an investment corporation to another Canadian corporation are free of tax in the hands of the receiving corporation. Dividends paid by an investment company to a resident of Canada are taxable in his hands but the receiver may deduct 20 percent of the dividend from his tax liability.[45]

To qualify for special consideration as an investment company under the Income Tax Act, a company must satisfy the following conditions throughout the relevant taxation year:

(a) at least 80 percent of its property must have been shares, bonds, marketable securities or cash;

(b) not less than 95 percent of its income must have been from these financial assets just mentioned;

(c) not less than 60 percent of its gross revenue must have been from taxable corporations;

(d) not more than 10 percent of its property may have been in the shares, bonds or securities of any one corporation or debtor (except governments of Canada);

(e) its shares must have been held by at least 50 persons with no one person holding more than 25 percent;

(f) not less than 85 percent of its gross income less taxes must have been distributed to shareholders before the end of the year.[46]

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45 Prior to 1955 an investment company which complied with certain conditions could elect to be exempt from tax. However, as a result of this election, its shareholders were not entitled to claim the 20 percent dividend credit for dividends received from it.

46 The so-called accumulating funds may meet this requirement by a method such as that adopted by Investors Growth Fund of Canada Limited, which in its Prospectus of November 25, 1957, states that: "It is the present plan of the Company to declare and pay dividends to its shareholders only once per year. Since this Fund has been created as a fully accumulative fund, no application for shares will be accepted unless accompanied by written authority of the shareholder to have all dividends declared by the Fund reinvested in additional shares at their asset value . . . Reinvested dividends will be taxable in the shareholders hands as though received in cash and will be eligible for the 20 percent tax credit granted on dividends from Canadian corporations".

In particular these regulations encourage investment companies to invest some three-fifths of their funds in taxable corporations. Moreover since the general feature of the Canadian income tax law by which dividends paid by one Canadian taxable corporation to another are not subject to tax in the hands of the receiving corporation applies also to investment companies, an additional incentive is provided to these companies to invest in the stocks (preferred or common) of Canadian companies. Some diversification of assets is also encouraged by the provisions limiting investments in the securities of any one issuer.

In 1954 a regulation of the Securities Exchange Commission of the United States permitted Canadian investment companies that met specified requirements, to register with the Commission and sell their shares publicly in the United States. The passing of this regulation removed a technical obstacle which had prevented American investors from taking full advantage of certain features of income tax laws in the two countries. Promoters of public companies had pressed for the removal of this obstacle and when the regulation was promulgated were quick to establish non-resident Canadian investment companies to sell shares to American investors.[47] In brief, a Canadian investment company may be so set up as to permit United States investors in such a company to derive a return which in their hands will not be taxed at more than the capital gains tax which is generally lower than the rates on individual income and which has a maximum rate of 25 percent. A principal consideration favouring companies incorporated in Canada over companies incorporated in the United States for this purpose is that accumulated income and capital gains of investment companies in the United States are taxed (at a rate that varies from state to state but which is at least 25 percent, whereas in Canada corporations in general are treated more favourably in this respect and companies which wish to elect to be taxed as non-resident investment companies may escape any special tax on accumulated earnings.

In Canada an investment company may choose to qualify for taxation as an investment company or as an ordinary corporation or it may elect to be taxed as a "non-resident-owned investment corporation". To be taxed as an investment company, at least 85 percent of income after taxes must be distributed to shareholders each year as we have seen; we shall therefore consider here the other two methods of taxing investment companies in Canada. If a Canadian investment company wishes to elect to be taxed as a non-resident-owned investment corporation it must meet certain conditions:

(a) at least 95 percent of the value of its issued shares and all of its indebtedness must be owned by or on behalf of non-residents;

(b) it must derive its income from owning or trading in bonds, shares, debentures, mortgages, notes and the like from lending money,

47 Prior to this development one or two closely held American companies had invested significant amounts in Canadian securities but their shares were not sold publicly.

> from rents or from estates and trusts, but not more than 10 percent of its income may be derived from rents and its principal business must not be the making of loans or trading in mortgages, bills, notes and the like.

Non-resident-owned corporations are taxed at the rate of 15 percent of their taxable income computed so as to include dividends from taxable Canadian corporations as well as other income (except dividends and interest received from other non-resident-owned investment corporations).[48] In general dividends paid by non-resident-owned investment corporations are not subject to withholding tax.

Since these companies for the most part accumulate their income and capital gains, the American investor is taxed only at the rate of the capital gains tax on the capital gain he may enjoy on disposing of his shares either in the open market or directly to the company.

Canadian investment companies owned predominantly by investors in the United States may elect to be taxed as an ordinary Canadian corporation. In this case the company pays no tax on dividends from taxable Canadian corporations, and its taxable income is therefore comprised largely of dividends from corporations not taxable in Canada and of interest earnings. The American investor may dispose of his shares on the open market or may have his shares redeemed by the company. In the former case he is liable only for the capital gains tax; in the latter case he also suffers a 15 percent withholding tax (paid by the company to the Canadian authorities) which may be offset against the capital gains tax.

As of the end of April 1957, four of the non-resident investment companies listed above were being taxed as ordinary Canadian corporations and four as "non-resident-owned investment corporations".[49] Irrespective of the way the companies elect to be taxed by the Canadian authorities they provide a medium to American investors for investment in Canadian securities which has decided tax advantages for these investors. These investors pay no income tax as such (only capital gains tax) to the American authorities. If they made their investments in Canadian securities as individuals, they would be subject to income tax (less withholding tax) and to capital gains tax. If they made their investments through investment funds incorporated in the United States they would be subject to income tax on the distributions of earnings required of these companies under United States law and to the capital gains tax on the disposal of their securities. Moreover, the companies themselves would be taxed on any accumulated earnings.

Thus, in summary, because of certain particular features of the tax laws in Canada and the United States relating to the taxing of accumulated

[48] Taxes paid to foreign governments may be deducted from income, but interest on indebtedness may not.

[49] The writer is grateful to Wood Gundy and Co. Limited for supplying this information.

earnings, of capital gains, of dividends and of income generally, investment companies have been established with the approval of the Securities Exchange Commission in the United States,[50] which have since 1954 directed American capital into Canadian securities especially common stocks in an amount upwards of $300 million.[51] Since the terms of the Investment Company Act in the United States under which the companies are registered and the by-laws of the companies themselves preclude the obtaining of dominant interest in any of the corporations in which they invest, the funds they supply are strictly in the nature of portfolio investment and not funds seeking control over Canadian enterprise.

(ii) The Securities Acts

The securities acts of the various provinces affect the flows of funds to and from the investment companies in a general way. The Securities Act of Ontario for example in a special part devoted to investment companies[52] sets forth the conditions to be satisfied in making "primary" distributions to the public of the shares of such companies.[53] In general the Act requires the filing of prospectuses and financial statements providing "full, true and plain disclosure" of all material facts relating to the securities being offered. The Securities Act of Ontario does not regulate the composition of the portfolios of investment companies, though the composition of the portfolio must be disclosed in the documents filed with the Securities Commission prior to the distribution of its securities.

The Investment Company Act of the United States under which non-resident Canadian investment companies are registered with the Securities Exchange Commission in some respects goes rather further in regulating the activities of investment companies under its jurisdiction. For example this Act requires a detailed registration statement including a recital of fundamental policies which cannot be changed without stockholder approval. It further requires of companies registered as diversified companies that with respect to at least 75 percent of their assets, their investments be so spread that not more than 5 percent of their assets are invested in any one corporation and not more than 10 percent of the voting securities of any one corporation are owned.

50 This approval is however conditional upon the satisfying of a number of requirements such as: (i) substantially all of the funds' property must be kept in the United States with United States custodians, (ii) the custodian must "consummate all purchases and sales of securities . . . other than purchases and sales on an established securities exchange, through the delivery of securities and receipt of cash, or vice versa as the case may be, within the United States".

51 For a detailed discussion of the tax legislation in Canada and the United States as it affects these companies see Leonard Bruce Boehner, "Canadian Investment Companies and Tax Savings", *National Tax Journal,* Vol. IX, 1956, pp. 166-176.

52 Investment companies are defined by this Act as follows: "A company, other than a company recognized by the (Ontario Securities) Commission as a mining company or an industrial company, whose principal business is the acquisition of or the investment in the securities of other companies whether for the purpose of acquiring control or management of such companies or for the purpose of deriving revenue from such securities and includes a company, other than an issuer within the meaning of The Investment Contracts Act, which issues investment certificates, investment contracts, savings certificates, savings contracts or securities of a like nature". R.S.O., 1950, C. 351, s. 1, cl. (f).

53 R.S.O., 1950, C. 351, s. 40.

(b) Other regulators

In reviewing the effect of taxes on the investment companies' flows of funds we referred to the condition in the Canadian legislation whereby a resident-owned company, in order to be taxed as an investment company, must avoid having more than 10 percent of its property invested in the liabilities of one company or private debtor. Although most Canadian resident companies may be classified as "management" companies, that is, as free of charter restrictions on the portfolios they may carry, there are many companies whose investment practices are subject to such restrictions.

Several companies have restrictions that prevent them from investing more than 5 or 10 percent of their assets in any one security or in the securities of any one company (securities of the governments of Canada, the United States and the United Kingdom are usually excepted).

At least half a dozen companies have restrictions that refer to the securities eligible for the portfolios of life insurance companies. Thus, Investors Syndicate of Canada undertakes to keep reserves at least equal to the aggregate surrender value of its certificates invested in cash or investments eligible for Canadian life insurance companies. Two further examples are Economic Investment Trust Limited which is required to keep at least 50 percent of its assets invested in securities eligible for life companies, and Investors Mutual of Canada which undertakes to keep at least 40 percent of its assets so invested.

In one or two cases such as Resources of Canada Limited and Corporate Investors Limited, there are restrictions relating to the proportion of assets that may be invested in the shares of companies not long established or which have not paid dividends in the last three years. In a few cases such as the All Canadian Dividend Fund and Diversified Income Shares for example, investment of all or part of the assets is restricted to the securities of a specified list of companies or issuers. In some instances, the holdings of the company are restricted entirely to the shares of an associated investment company. Thus the assets of the Mutual Income Fund are invested entirely in shares of Mutual Accumulating Fund.

The non-resident companies too, have restrictions in their charters or by-laws in addition to those already mentioned. Thus, for example, Scudder Fund of Canada Limited may not own more than 5 percent of the voting securities of any company and may not invest more than 5 percent of its assets in companies less than three years old.

Investment policy of the companies is, of course, also affected not only by the charter and by-law provisions but also by the objectives of the companies and by the existing and expected relative prices and yields of financial assets. Several of the resident-owned companies invest part, at least, of their assets with the object of obtaining control of operating

companies. Others are expressly restricted from holding more than a small proportion of the voting stock of the companies in which they invest. Some companies emphasize growth in the market value of their holdings, others give more emphasis to regularity of income from investments. Most emphasize diversity of holdings in their investment strategy although "diversity" is variously defined. "Diversity" may refer to the spreading of investments among a variety of industries, or among a variety of kinds of securities (common stocks, preferred stocks, industrial bonds, government bonds) or among securities deemed to have varying chances of capital appreciation.

The overriding investment policy, together with income tax and charter restrictions will govern the degree of sensitivity of the companies to changes or expected changes in relative yields and prices of securities. The so-called "fixed" investment trust in which management is restricted to investment in a list of specified securities is much less important, relatively, today than it once was; management of the funds today is generally accorded very free rein to choose and shift investments at its discretion. There is considerable shifting of portfolios as can be judged by even casual inspection of those published. Of course the so-called common stock funds which invest upwards of 80 or 90 percent of their assets in common stocks as a matter of policy will be relatively insensitive to changes in bond yields as compared with stock yields; similarly the so-called balanced funds will weigh the advantages of responding to emerging yield differentials against the requirements of their balancing strategy. But in general, one would suppose that the managers of these funds must be counted among the more sensitive investors in the capital market. A considerable amount of very detailed research would be required to prepare a well documented account of the sensitivity of these investors. Much information for such a research programme is available; the prices of traded stocks are available and many of the companies, especially the mutual funds, publish the details of their portfolios frequently, in some cases even quarterly. We have not been able to undertake such detailed research for this study however.

D. Life Insurance Companies

1. *A Factual Review*

Life insurance contracts are written in Canada by companies and by fraternal benefit societies. Most of these organizations are registered with federal authorities as well as licensed by provincial authorities. Except in Nova Scotia all organizations must be licensed in each province in which they do business. The net value of all life insurance policies in force in Canada at the end of 1956 was $31.3 billion. (See Table 7.6). Policies representing 93 percent of this amount were held with companies registered by the federal authorities. It is with these companies that we shall be principally concerned in this section.

Table 7.6

VALUE OF LIFE INSURANCE POLICIES IN FORCE IN CANADA
DECEMBER 31, 1956

	$ Billion	Percent
Federally registered organizations		
Companies	29.1	93.0
Fraternal benefit societies	.4	1.3
Total	29.5	94.3
Provincially licensed organizations		
Companies	1.4	4.6
Fraternal benefit societies	.4	1.1
Total	1.8	5.7
Grand Total	31.3	100.0

(a) Assets

At the end of 1956 the total assets of Canadian life insurance companies and the assets in Canada of foreign life insurance companies[54] totalled 8.2 billion dollars.[55] The assets of the Canadian chartered banks at the end of 1956 were $13.4 billion. The assets of Canadian life insurance companies have grown at an annual average compound rate of about 6½ percent since 1926, whereas the growth of gross national product in current dollars, from the period 1926-28 to the period 1954-56, is given at an annual average compound rate of a little less than 5¾ percent.

In Table 7.7 an historical comparison of the distribution of the assets of Canadian life insurance companies by broad categories of assets is shown. In Table 7.8 a rather more detailed statement of the assets of Canadian companies as of the end of 1956 may be found. In round figures, the Canadian companies at the end of 1956 held about one-half of their total assets in bonds, a third in mortgages and agreements of sale, a twentieth in stocks of all kinds and the other one-eighth in policy loans, real estate, cash and miscellaneous assets. The proportion of bonds in the portfolios was swelled by the two world wars, with the acquisition of federal government bonds. In 1945 Canadian companies held one-third of their assets in Canadian federal government bonds, but by the end of 1956 this proportion had been reduced to one-twentieth. There has been since the 1880's a secular increase in the proportion of corporation bonds in the portfolios and a decrease in the proportion of municipal bonds. There has also been a secular decline in the proportions of policy loans, collateral loans (these are now insignificant) and "other assets" in

[54] We shall mean by "Canadian companies" companies incorporated under federal or provincial law in Canada and registered with the Federal Department of Insurance; by "foreign companies" we shall mean all other companies registered with the Department of Insurance.

[55] Total assets of Canadian fraternal benefit societies and assets in Canada of foreign societies totalled $159 million at the end of 1956. The assets of provincial companies were probably somewhat over $100 million. The information for federally registered organizations is from the *Report of the Superintendent of Insurance for Canada, 1956,* Vol. I.

the portfolios. Mortgages before the thirties occupied about one-third of the portfolio though they were rather lower after the first war.[56] At the end of World War II they were less important again, but since then have regained their former place. The role of stocks in the portfolios is coloured by the investment practices of one company in particular in the twenties and thirties. The Sun Life Company, by far the largest company in Canada (having about 39 percent of the assets of all Canadian companies in 1930 and 30 percent in 1956) invested very heavily in common stocks in this period. In 1930 this company had just over 50 percent of its assets invested in common stocks (book values).[57] But in all the other Canadian companies investment in stocks has been at a very much lower level, though practice among the companies has differed somewhat. In 1930 Canadian companies other than the Sun, had 3.34 percent of their assets invested in stocks (common and preferred) and in 1956 all Canadian companies had 5.3 percent of their assets invested in stocks.

We have mentioned that one company in Canada owned 30 percent of the assets of all Canadian companies at the end of 1956. In Table 7.8 we present distributions of numbers of companies and their assets by sizes of assets. Canadian and foreign companies are shown separately in this table. Among the Canadian companies, six companies control about three-quarters of the assets. Among the foreign companies one company controls 45 percent of the assets in Canada. Altogether seven of the eighty-three federally registered companies operating in Canada control just over two-thirds of the total assets of Canadian companies plus the assets in Canada of foreign companies.

There are some differences in the investment patterns of companies of different sizes. In Table 7.9 we show distributions of assets among classes of assets for groups of companies of different sizes as of the end of 1956. Among the Canadian companies, the Sun Life is shown separately in the category "over $2 billion". This company has rather higher proportions of its assets in bonds, stocks and cash and lower proportions in the other categories of assets than do the other Canadian companies. Considering the other Canadian companies we find that the proportion of assets invested in bonds increases with decreasing size of company while the proportion in mortgages decreases with decreasing size of company. The proportion in stocks, excluding the Sun Life, is smaller for large companies than for smaller companies. Among the foreign companies generally, a larger percentage of assets in Canada is invested in bonds than is true of total assets of Canadian companies, though the smaller foreign companies invest a higher proportion of their assets in bonds than do the larger companies. Also as with the Canadian companies, the larger foreign companies

56 In interpreting the figures shown for 1930, allowance must be made for the influence of the Sun Life Assurance Co. on the figures. Companies other than the Sun held some 35 percent of their assets in mortgages and agreements of sale at the end of 1930.

57 Such a high investment in common stocks is not now legally possible for Canadian companies.

Table 7.7

CLASSIFICATION OF THE ASSETS OF CANADIAN LIFE INSURANCE COMPANIES AT INTERVALS SINCE 1881

(percentages)

	1881	1891	1901	1911	1921	1930	1935	1940	1945	1950	1955
Bonds	41.8	18.6	33.8	35.7	45.8	28.3	40.8	55.9	75.9	66.3	54.1
Canadian federal government	.1	.2	.4	.1	12.0	2.2	9.4	12.6	33.1	18.6	7.5
Other	41.7	18.4	33.4	35.6	33.8	26.1	31.4	43.3	42.8	47.7	46.6
Stocks	2.2	3.2	5.9	4.9	3.3	23.8	17.7	12.1	6.0	6.0	5.3
Preferred	—	—	—	—	—	3.2	1.7	1.6	1.7	2.9	1.9
Common[a]	—	—	—	—	—	20.6	15.9	10.6	4.2	3.1	3.3
Mortgage loans and agreements of sale	30.7	43.0	28.9	33.6	25.4	23.3	16.8	13.5	8.4	18.3	30.5
Real estate	4.3	8.1	7.8	4.2	3.8	3.1	4.0	3.0	1.1	1.2	2.5
Collateral loans	.1	10.7	5.9	1.3	.3	.1	—	—	—	—	—
Policy loans	9.1	8.5	9.8	12.1	12.7	15.2	14.5	9.8	5.1	4.5	4.8
Cash	2.5	1.9	1.6	1.3	1.0	1.2	2.1	2.2	1.1	1.0	1.0
Other assets	9.3	6.1	5.3	4.5	5.4	5.0	4.1	3.2	2.5	2.7	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a The proportion of common stocks in the portfolio of the Sun Life Assurance Co. was 50.5%, 38.9% and 22.7% in 1930, 1935 and 1940 respectively. The proportion of common stocks in the portfolios of the other companies was 1.6%, 1.8% and 2.9% in 1930, 1935 and 1940 respectively.

SOURCE: *Reports of the Superintendent of Insurance*. Percentages are based on book values of assets.

Table 7.8

DISTRIBUTION OF FEDERALLY REGISTERED LIFE INSURANCE COMPANIES AND COMPANY ASSETS BY SIZE OF ASSETS, AS AT THE END OF 1956

Asset Class	Canadian Companies				Foreign Companies			
	Companies		Assets		Companies		Assets	
	No.	Percent	$ Million	Percent	No.	Percent	$ Million	Percent
$2 billion and over	1[a]	3.1	2,008	30.1	0		0	
Over $1 billion and under $2 billion........	0	0	0	0	0		0	
Over $500 million and under $1 billion........	5	15.6	2,943	44.1	1[b]	2.0	683	44.6
Over $100 million and under $500 million.......	5	15.6	1,215	18.2	2	3.9	532	34.7
Over $25 million and under $100 million.......	10	31.3	417	6.3	4	7.8	220	14.4
Over $1 million and under $25 million.......	10	31.3	86	1.3	15	29.4	88	5.8
$1 million and under.........	1	3.1	1	—	29	56.9	9	.6
Total.......	32	100.0	6,670	100.0	51	100.0	1,532	100.0

a Sun Life Assurance Company of Canada.

b Metropolitan Life Insurance Company.

SOURCE: *Report of the Superintendent of Insurance for Canada, 1956* Vol. 1, pp. 24A-25A and 50A-53A. Assets are total assets of Canadian companies at book values and assets in Canada of foreign companies at market values.

invest a higher percentage of their assets in mortgages than do the smaller companies. The smaller companies invest relatively more heavily in stocks than the larger companies, and it may be noted that among the larger companies, the British one, (The Standard Life Assurance Co.) though the smallest of the three[58] has by far the largest relative investment in stocks of the companies in this group. This is to be attributed to the fact that it is a British company.

There is a very great difference between the investment patterns of North American companies on the one hand and companies in the United Kingdom on the other hand as is shown in the classification of assets of companies in the U.K., the U.S., and Canada in Table 7.10. The most striking differences are in the proportions of assets invested in stocks, mortgages and policy loans. The British companies invest of the order of 15 percent of their assets in mortgages[59] and policy loans, while Canadian and U.S. companies invest about one-third in mortgages and another

58 The Metropolitan Life Company and The Prudential Insurance Company of America are the other two companies in this group.

59 There are some differences in the types of institutions operating in North American as compared with British capital markets that in part account for this, for example the very important role in the British mortgage market of the building societies.

Table 7.9

DISTRIBUTIONS OF ASSETS BY SIZE OF COMPANY

(percentages)

Assets	Bonds	Stocks	Mortgages and Agreements of Sale	Real Estate	Policy Loans and Collateral Loans	Cash	Other Assets	Total
Canadian Companies:								
Over $2 billion....	60.0	7.7	23.0	2.2	4.1	1.4	1.7	100.0
Over $500 million and under $1 billion.........	45.3	3.9	40.3	3.0	4.7	0.3	2.5	100.0
Over $100 million and under $500 million........	48.5	5.0	34.4	3.4	5.8	0.7	2.2	100.0
$100 million and under..........	50.8	4.85	33.6	2.3	5.8	0.35	2.3	100.0
All Canadian Companies.....	50.7	5.3	33.5	2.8	4.8	1.0	1.9	100.0
Foreign Companies:								
Over $100 million and under $1 billion.........	68.9	2.9	21.5	0.3	4.5	0.6	1.3	100.0
$100 million and under..........	76.4	5.1	9.6	1.0	4.1	2.0	1.8	100.0
All Foreign Companies.....	70.5	3.4	19.0	0.4	4.4	0.9	1.4	100.0
All Companies....	54.4	5.0	30.8	2.3	4.7	1.0	1.8	100.0

SOURCE: *Report of the Superintendent of Insurance for Canada, 1956* Vol. 1, pp. 24A-25A and 50A-53A. Assets are total assets of Canadian companies at book values and assets in Canada of foreign companies at market value.

4 or 5 percent in policy loans. The British companies invest over one-fifth of their assets in stocks (22 percent at the end of 1956) while the Canadian companies invest a little over 5 percent and the American companies even less (3.65 percent at the end of 1956). The British companies invest rather less in bonds and rather more in real estate, cash and other assets than do North American companies.

The British insurance companies have been increasing the proportion of their assets invested in common shares since the end of the First World War, though the trend was interrupted by the Second World War. In 1922 for example British life insurance companies had 3.1 percent of their assets in common shares. In 1937 the figure was 9.8 percent. In 1951 it was some 11 percent and as we have seen at the end of 1956 it was well over 15 percent. At the end of 1956 none of the 42 companies whose investments are reported annually in *The Economist* had as low a proportion of its assets in common stocks as the average for Canadian companies or the average for United States companies. There were three

of these British companies with over 30 percent of their assets in common stocks and there were eighteen of them with 20 percent or more of their assets in common stocks. The ratio in the United States has not shown the rising trend exhibited by the British companies.

Table 7.10

CLASSIFICATION OF THE ASSETS OF LIFE INSURANCE COMPANIES AS AT THE END OF 1956

CANADIAN COMPANIES, FOREIGN COMPANIES IN CANADA, COMPANIES IN THE UNITED STATES AND COMPANIES IN THE UNITED KINGDOM

(percentages)

	Companies in the United Kingdom	Companies in the United States	Canadian Companies	Foreign Companies in Canada	All Companies in Canada
Bonds	46.8	51.2	50.7	70.5	54.4
Central government	23.7	7.9	5.0		
Other government	9.4		15.9		
Domestic		2.4	9.5		
Foreign			6.4		
Corporate	13.7		29.8		
Domestic		38.1	14.3		
Foreign			15.5		
Total foreign (government and corporate)		2.8	21.9		
Stocks	22.3	3.6	5.3	3.4	5.0
Preferred	6.9		1.7		
Domestic		1.6	.4		
Foreign			1.3		
Common	15.4		3.6		
Domestic		2.0	.9		
Foreign			2.7		
Total foreign and (preferred and common)		—	4.0		
Mortgages and agreements of sale	14.8	34.4	33.5	19.0	30.8
Policy loans and collateral loans		3.7	4.8	4.4	4.7
Real Estate	7.7	2.9	2.8	.4	2.4
Cash	8.4	1.3	1.0	.9	1.0
Other Assets		2.9	1.9	1.4	1.8
Total	100.0	100.0	100.0	100.0	100.0

Sources for Table 7.10

Companies in the United Kingdom: These are the consolidated assets at book value of 44 offices as reported in *The Economist*, July 13, 1957, special section entitled "British Insurance", p. 2.

Companies in the United States: These are all assets of all United States legal reserve life insurance companies. The assets are at annual statement asset value, with bonds at amortized values and stocks at market values. The figures are taken from *Business Statistics, 1957*, United States Department of Commerce, p. 88.

Canadian Companies: The figures pertain to the total assets at book values, of Canadian companies and are taken from *Reports of the Superintendent of Insurance for Canada, 1956*.

Foreign Companies in Canada: The figures pertain to the assets at market values in Canada of foreign companies whether on deposit with the Minister of Finance or a trustee or otherwise held for the protection of Canadian policyholders and are taken from *Report of the Superintendent of Insurance for Canada, 1956*.

(b) The value and character of contracts written

Turning from the assets of life insurance companies to the value and character of the contracts they write, we find that the rate of growth of insurance in force has been growing since the mid-thirties and at an increasing rate. In the quinquennium from the end of 1935 to the end of 1940 the value of insurance in force rose by 11 percent. From 1950 to 1955 it rose by 62 percent. (See Table 7.11). This fact of growth has important implications for the investment policy of the companies as will be shown below. The distribution of insurance in force by broad classes of insurance is shown in Table 7.11. There has been a marked decline in the proportion of industrial insurance, and a striking rise, especially since the end of World War II, in the proportion of group insurance. Group insurance has grown at the expense of ordinary and industrial insurance. Whereas during 1945 about 6 percent of the insurance effected was group insurance, during 1956 this class accounted for some 23 percent of the total effected. From the end of 1945 to the end of 1956 the increase in group insurance in force was just over one-third of the total increase in insurance in force. The growing importance of group contracts is to be seen in the annuity side of the life insurance business as well. Consi-

Table 7.11

STATISTICS OF INSURANCE IN FORCE AND INSURANCE EFFECTED IN CANADA SELECTED YEARS

A

Distribution by Type of Insurance in Force

Year	Ordinary	Industrial	Group	Total		Group Insurance as a percent of Insurance Effected
				Percent	$ Million	
1930......	79.4	13.2	7.4	100.0	6,492	6.7
1935......	78.7	13.2	8.1	100.0	6,259	3.1
1940......	76.2	13.3	10.5	100.0	6,975	4.6
1945......	75.6	13.5	10.9	100.0	9,751	5.8
1950......	73.8	9.8	16.4	100.0	15,746	13.5
1955......	69.3	6.6	24.1	100.0	25,452	18.9
1956......	68.3	5.7	26.0	100.0	29,087	23.1

B

The Value of Insurance in Force in Canada

Rate of Growth per Quinquennium

1930-1935	— 3.6%
1935-1940	11.4
1940-1945	39.8
1945-1950	61.5
1950-1955	61.6

SOURCE: *Reports of the Superintendent of Insurance for Canada.*

dering the distribution of annuities in force in terms of the annual payments for which the companies have liability, one finds that group annuities are now by a wide margin the preponderant form of annuity, whereas twenty years ago individual annuities were much more important. At the end of the war the liability for annual payments was 55 percent of the total liability for annual payments under annuity contracts; at the end of 1956 this figure was 85 percent. (See Table 7.12). The ascendency of group annuities with life insurance companies is an aspect of the very rapid growth of industrial pensions plans in recent years.

(c) The Transactions Accounts and Policyholder Saving

The National Transactions Accounts also provide an indication of the pattern of investments and the growth of the business in the post-war years. The details may be found in Part VI below. The totals of the financial flows for the first nine post-war years are shown in Table 7.13. The very much larger flows of funds into mortgages and bonds of corporations (and non-Canadian governments) as compared with stocks and provincial and municipal bonds may clearly be seen, as well as the substantial net decline in holdings of federal government bonds in reaction to the large war-time increase in holdings of these assets.

The credit item opposite "insurance and pensions" warrants special comment. It is the counterpart of what is sometimes referred to as "policyholder saving" through federally registered and provincial life insurance companies, and includes such saving through annuity contracts (group and otherwise) as well as through life insurance contracts. A more detailed and technical account of its calculation may be found in Part VI below, here only a brief statement of the notion is offered. In the national income and expenditure accounts the insurance companies are deemed to act as agents for their policyholders; this treatment is also followed in the transactions accounts. The income the companies receive from

Table 7.12

DISTRIBUTION OF ANNUITIES IN FORCE AS MEASURED BY ANNUAL PAYMENT

Year	Individual Annuity	Group Annuity	Settlement and Disability Annuity	Total	
				Percent	$ Million
1930	25.2	37.9	36.9	100.0	6
1935	48.5	29.4	22.1	100.0	18
1940	39.4	49.4	11.1	100.0	50
1945	35.0	55.4	9.6	100.0	79
1950	20.1	74.7	5.2	100.0	203
1955	13.4	83.0	3.6	100.0	382
1956	12.1	84.6	3.3	100.0	474

SOURCE: *Reports of the Superintendent of Insurance for Canada.*

Table 7.13

FINANCIAL AND "OTHER" TRANSACTIONS OF FEDERALLY REGISTERED AND PROVINCIAL LIFE INSURANCE COMPANIES, 1946-1954

(millions of dollars)

	Debits	Credits
Saving minus Investment		— 15
Currency and Bank Deposits	— 1	
Bank Loans		— 7
Other Loans	92	
Claims on Associated Enterprises	—206	
Mortgages	1,281	
Government of Canada Bonds	—933	
Provincial Bonds	211	
Municipal Bonds	212	
Other Bonds	1,378	
Stocks	50	2
Insurance and Pensions		2,246
Other Transactions and Errors (net)	145	
Total	2,227	2,227

investments is regarded as part of consumer income and the companies' expenses and profits are regarded as a fee for administrative services paid by consumers as part of consumer expenditure. The difference between the companies' income from investments and the total of their expenses and profits is therefore recorded in national accounts as part of consumer saving. We may think of it as an imputed premium paid for insurance and annuities. If to this imputed premium we add the difference between cash premiums paid and cash claims received by the consumer sector we obtain the item referred to as "policyholder saving" and recorded as a credit for the consumer sector in the category "insurance and pensions". In Table 7.14 policyholder saving (or consumer saving) through federally registered and provincial life insurance companies is shown as a percentage of total consumer saving as recorded in the national accounts. The ratio averages out over the first nine post-war years at about one-quarter. Of the total of policyholder saving over the years 1946 to 1954, 71 percent was accomplished through Canadian life companies, 25 percent through foreign companies and the remainder through provincial companies.

(d) Some factors affecting the size of the pool of funds under administration

In most life insurance contracts, the insured pays in advance for the protection he seeks and the company anticipates earnings on the prepayments in setting its rates. The protection sought may be against dying (an insurance contract) or against living (an annuity contract) or a combination of both. The amount of prepayment varies with the type of contract. The fact of prepayment is the key to the importance of the life

Table 7.14

CONSUMER SAVING THROUGH FEDERALLY REGISTERED AND PROVINCIAL LIFE INSURANCE COMPANIES AS A PERCENTAGE OF TOTAL CONSUMER SAVING, 1946 TO 1954

Year	Consumer Saving Through Federally Registered Life Insurance Companies	Consumer Saving	Ratio
1946	190	892	21.3
1947	228	494	46.1
1948	212	994	21.3
1949	231	926	24.9
1950	252	662	38.0
1951	235	1,134	20.7
1952	271	1,291	21.0
1953	302	1,312	23.0
1954	327	809	40.4
Total	2,246	8,514	26.4

insurance companies as intermediaries — as reservoirs in the flows of funds — in the capital market.

The attractiveness of a contract which allows prepayment is quickly appreciated when it is noted that the risk of death rises with age. If premiums at each age were charged in proportion to the risks of death at each age, premiums would be low before and during periods of highest earning power for the insured, and high in later life when he might be quite unable to earn. The tendency has been therefore to promote the sale of contracts by which the premiums charged at each age are either constant (the level depending on the age of the insured at the date of the contract) for a definite or indefinite period, or even more closely tailored to the insured's expected course of annual earnings. The prime example of insurance in which cost is proportional to the age of the insured is one-year renewable term insurance sold to individuals through separate contracts. When such insurance is sold to a group through a group contract, it is possible to effect some levelling of charges across the ages of those in the group.

We shall be especially concerned with the pool of funds under administration by the company and the effects of changes in the character and volume of business on the size and expected size of the pool. The pool of funds is increased by an excess of premiums and interest earnings over claims and expenses. The future course of a company's pool of funds will depend upon the character and volume of the contracts presently on its books and upon the character and volume of the contracts it will write in the future. We shall discuss at some length the future course of the size of the pool as it is determined by the contracts already on a company's

books, and for convenience we refer to this course as "the pool curve". "The pool curve" as the term is used here, thus refers to the expected volume of funds under administration at successive dates in the future on the assumption that no new business is written. It is an expositional device that is helpful in explaining certain important fundamental considerations.

Given that prepayment of charges for protection is the key to the difference between life companies and, say, fire companies in terms of the volume of investments under administration per premium dollar earned, life companies can, theoretically, differ widely among themselves in this respect. Among the important causes of such differences are (i) variations in the age composition of their policyholders, (ii) variations in the composition of their outstanding policies in terms of the degree of prepayment involved, and (iii) variations in the rate of growth of their business. A brief examination of each of these causes follows.

(i) The effect of the age composition of policyholders.

Suppose a company sells a batch of 100,000 identical whole life policies to persons all of the age of 50, charging a fixed premium per annum in the expectation of earning interest at the rate of say 3 percent per annum. Costs of administration aside and supposing that mortality and investment experience are about as anticipated, premium and interest income from these policies will exceed claims for some 18 years by which time the fund under administration will have grown to a figure of the order of 30 percent of the total face value of the policies written. After 18 years the fund will decline, first at an increasing rate and later at a decreasing rate, for another 30 years roughly. If, however, the company had sold the 100,000 identical whole life policies to persons all of the age of 30, while the maximum of the fund under administration would only have been slightly higher than in the previous case it would accumulate towards its maximum over a period of some 33 years and be dissipated over a period of a further 35 years so that the area under the pool curve over the full life of the policies would be substantially larger in the case of the policies issued to those aged 30.

The effect of the age of the policyholder on the pool of funds built up with the company, varies with the type of policy issued of course, but, by and large, the following generalization is true: other factors remaining unchanged, the younger are the policyholders, the larger will be the volume of funds coming under the administration of life companies.

(ii) The effect of the composition of the business

The types of contract that may be written vary greatly in the contribution they make to the pool of funds in the company, ranging from one-year term insurance at one extreme to single pay deferred annuities

at the other. Changes in the composition of business will affect not only the volume of funds under administration, but as we shall see, will also have implications for investment policy.

If we now study the pool curves for several typical kinds of insurance contract we readily confirm what is obiously intuitive, namely that endowment policies and limited-pay life policies tend to place larger volumes of funds in the companies' hands than whole life policies, which in turn contribute substantially larger pools than term insurance. In Chart 7.1 (see p. 385) pool curves for four specified types of policy are shown on a comparable basis. The four types of policy are 20-year term, whole life, 20-pay life and 20-year endowment with life annuity as settlement option.[60] It is assumed that contracts with face value of $1 are sold to groups of 100,000 persons each aged 50. Interest is figured at 3 percent. Expenses are ignored and it is assumed that mortality experience follows the American experience table.

An annuity is fundamentally a different kind of contract from a life policy and it is therefore difficult to compare with a life policy. Where a life policy undertakes to pay a fixed amount upon the death of the insured, or in the case of an endowment policy, at death or after x years if the policyholder is still living, an annuity contract undertakes to pay the annuitant a fixed sum per annum for so long as he lives, payments beginning immediately or after x years. Annuity contracts may be heavy contributors to the company's total pool of funds. This has already been illustrated from one point of view in the chart above, by the case of the 20-year endowment with life annuity as settlement. It may also be illustrated by the following example: If 100,000 persons aged 50 bought immediate life annuities of $1, then if interest is figured at 3 percent, immediately after the sale of the annuities (and apart from expenses) the pool would stand just under $1.5 million. (This figure may be compared with the maximum size of the pool, just under $30 thousand, associated with the sale of 100,000 whole life policies with face value of $1 to persons aged 50.) This pool would decline from the outset, first at an increasing rate and later at a decreasing rate.

The total volume of funds under administration by a company at any time thus depends very directly on the class of contracts that has figured prominently in their recent business. A swing toward annuities including group annuities associated with pension funds will greatly

60 A 20-year term policy is one on which premiums are paid for 20 years and a death benefit is paid in event of death within those 20 years.

A whole life policy is here defined to be one on which premiums are paid until death at which time the death benefit is paid to the beneficiary.

A 20-pay life policy is one on which premiums are paid for 20 years at most and the death benefit is paid whenever that may occur.

A 20-year endowment is defined as a contract whereby the policyholder pays premiums for a maximum of 20 years and then receives a stipulated sum of money if he is still living. A death benefit is paid if death occurs within the 20 years. A life annuity settlement option in this case is one by which the capital sum of the endowment is used as a premium to buy an immediate life annuity.

increase the funds under administration; in this country in recent years, the effects of the swing toward annuities have been tempered in part by the concomitant growth of group term insurance, and the relative decline in the importance of endowment policies.

(iii) The effect of the rate of growth of the business

The pool curve relating to a company's existing business is affected not only by the age composition of the policyholders and the classes of policies written, but by the course of total business as well. It is manifest that if the value of new policies written rises each year, the total volume of funds under administration by the companies will grow. It is perhaps less obvious that rapidly growing companies tend to generate a sort of momentum which will prolong an increase in their funds or assets even beyond a period in which new business has been growing, into a period in which new business declines or even ceases altogether. Let us elaborate on this point.

We may note first of all that prior to the great depression of the early nineteen thirties, life insurance effected by Canadian companies rose at a very rapid rate. In fact, in each quinquennium 1920 to 1924 and 1925 to 1929 the value of new life insurance policies effected rose by slightly more than 100 percent. In the next quinquennium however, the value of new policies effected fell by some 9 percent. Nevertheless the total assets of Canadian companies continued to rise throughout the depression though the rate of increase was retarded for a few years. However, this is not a wholly satisfactory illustration of the proposition we wish to discuss inasmuch as during the thirties there was a very substantial growth in annuities. But the growth in annuities, though important, did not dominate the situation, for the increase in assets from the end of 1929 to the end of 1934 was much greater than the total consideration for annuities received by the companies in this period.

Perhaps the theoretical aspects of the proposition can best be demonstrated with the aid of the following two illustrations. Suppose that a company writes a given batch of policies in decade No. 1 and that the net cash income (premiums plus interest less claims and expenses) over the next six decades is as shown in column 1 of Table 7.15, viz., 1, 5, 4, -5, -3, -2. Now suppose further that in each of the next five decades policies of exactly the same number and kind are written so that by the end of six decades the total fund will have levelled out at the figure 24 as shown in the table. If in succeeding decades the business of the past decades is exactly reproduced there will be no change in the total size of the pool under administration since in any decade the increments and decrements to the pool on account of current and past business would be exactly the increments and decrements associated with the full life history of the batch of policies sold in any one decade and these are necessarily zero

in total. If after the sixth decade the company suddenly stopped writing any new business the pool of funds under administration would fall immediately and continue to fall until the last surviving policyholder had died.

Table 7.15

A STATIONARY INSURANCE FUND

Net increments to the pool associated with policies written in each of the decades						Increments to total pool in succeeding decades	Total pool in succeeding decades	Decades
1	2	3	4	5	6			
1						1	1	1
5	1					6	7	2
4	5	1				10	17	3
-5	4	5	1			5	22	4
-3	-5	4	5	1		2	24	5
-2	-3	-5	4	5	1	0	24	6
	-2	-3	-5	4	5	-1	23	7
		-2	-3	-5	4	-6	17	8
			-2	-3	-5	-10	7	9
				-2	-3	-5	2	10
					-2	-2	0	11

Now, let us contrast this case with the following one in which the amount of new insurance written changes from one decade to another. We adhere to the assumption that the age composition of the new policyholders is the same from decade to decade and that the relative proportions of contracts of different types also is unchanged from decade to decade. However we suppose that the rates of change in new business written from decade to decade are approximately the same as the rates of change in value of new policies effected by Canadian companies in the decades of the last sixty years ending with 1956. Accordingly the factors by which the business of each succeeding decade exceeds that of the previous decade are 2.2 for the second decade, 3.5 for the third, 2.0 for the fourth, 1.0 for the fifth and 3.0 for the sixth. It must be emphasized that in this example we are not trying to reproduce all features of the growth of life insurance in Canada in the last 60 years. Indeed quite explicitly we are abstracting from the effects of the changing composition of business and concentrating on changes in the rate of growth. In the table entitled *A Growing Insurance Fund,* (Table 7.16) we suppose that the batch of policies written in decade No. 1 is precisely the same as in the previous example, so that the net cash income arising from these policies over the six decades is as before, 1, 5, 4, -5, -3, -2. By allowing the new business of succeeding decades to increase by factors suggested above, the succeeding columns of the illustrative table are built up. Although the absolute magnitude of the figures in the table are purely

fictitious and of no interest, we are interested in the course of the total pool of funds *after* the sixth decade. This shows that even if no new business were written after the sixth decade, the total assets of the companies — the pool of funds under administration — would continue to grow in each of the next two succeeding decades. This is because the recent rapid rate of growth of new business heavily weights the positive contributions of recent business to the total pool of funds, relatively to the negative contributions of business written earlier.

We must emphasize again that this illustration concentrates on the rate of growth of the business. Changes in the composition of the business modify the effects of a rapid rate of growth in new business or the prospects for the future growth of assets. In Canada we have indeed experienced a very rapid rate of growth of new business, but as we have seen the composition of the business has also changed. Among ordinary life insurance contracts there has been a decrease in the proportion of endowment insurance in force.[61] There has also been an increase in the proportion of group term insurance in total insurance effected. Both of these developments would tend to mitigate the effect of recent growth of business on future growth of assets. The dramatic increase in annuities, especially group annuities in force, on the other hand would accentuate the effect of the growth of business on future assets. On balance there seems little doubt that the Canadian companies as a group — the expectations of individual companies of course vary — are in the position of enjoying a considerable momentum in the growth of their assets as a result of the

Table 7.16

A GROWING INSURANCE FUND

Net increments to the pool associated with policies written in each of the decades						Increments to the total pool in succeeding decades	Total pool in succeeding decades	Decades
1	2	3	4	5	6			
1						1.0	1.0	1
5	2.2					7.2	8.2	2
4	11.0	7.7				22.7	30.9	3
—5	8.8	38.5	15.4			57.7	88.6	4
—3	—11.0	30.8	77.0	15.4		109.2	197.8	5
—2	— 6.6	—38.5	61.6	77.0	46.2	137.7	335.5	6
	— 4.4	—23.1	—77.0	61.6	221.0	178.1	513.6	7
		—15.4	—46.2	—77.0	184.8	46.2	559.8	8
			—30.8	—46.2	—221.0	—298.0	261.8	9
				—30.8	—138.6	—169.4	92.4	10
					— 92.4	— 92.4	0.0	11

61 For the companies which, at the end of 1956, held approximately 75 percent of the assets of all Canadian companies, the ratio of ordinary endowment insurance in force to total ordinary insurance in force rose from 27.5 percent at the end of 1930 to 36.0 percent at the end of 1946, but then fell to 30.7 percent at the end of 1953.

post-war growth of the new business effected. Indeed it is probably no exaggeration to suggest that even if they wrote no new business their assets would continue to rise for another 10 to 20 years.

This being the case, considerations of liquidity can hardly be of paramount concern to the investment officer of a life insurance company in Canada. Though the demand for policy loans, the surrendering of policies and the necessity of honouring commitments to investors create some demand for liquidity, the very momentum of the growth of assets must make investment officers much more concerned with keeping cash balances down rather than up.

A further implication of the momentum of the growth of assets is that rapidly growing companies do not need to arrange to have assets mature within the next 10 to 20 years or need to contemplate selling assets within this period for the purpose of meeting an excess of claims and expenses over premiums and investment income. Such action would not be necessary even in the worst of all possible worlds in which sales of new insurance and annuities collapsed completely. Long-term investments would seem to be eminently suitable for the portfolio of life insurance companies.

In concluding this factual review of the life insurance companies we note that while the Canadian companies enjoy very considerable momentum in the growth of their assets, and while the mean term of their liabilities is very long indeed, their assets are on the whole of rather short term as compared with their liabilities. As we have seen, about a third of their assets are in mortgages which probably have an average term (considering that principal is repaid in regular instalments) of something of the order of ten years. A half of their assets are in government or corporation bonds of which only a very small proportion will mature after 20 years. Accordingly the companies have not only a problem of keeping their cash balances down, they have to reinvest assets continually. Moreover, and more important, as we shall argue at greater length below, since the average term of assets is considerably less than the average term of liabilities, the companies or their policyholders and annuitants stand to lose if yields on assets fall.

2. *Regulators of the Flows of Funds*

(a) The Insurance Companies Acts[62]

In this section we shall be concerned with the legislation governing life insurance companies operating under federal jurisdiction as it affects the investment powers of the companies and as it affects the valuation to be placed on these investments for purposes of official returns.

62 Canadian and British Insurance Companies Act, Ch. 31, Revised Statutes of Canada, 1952. Foreign Insurance Companies Act, Ch. 125, Revised Statutes of Canada, 1952.

(i) The investment powers of federally registered life insurance companies

The philosophy underlying the legislative limitations on the investment powers of life insurance companies would appear to be to assure, so far as possible, the security of principal or income of each investment parcel. There are few limitations imposed on investment in fixed income securities backed by taxing power or specific charges on real property. Other securities such as debentures and stocks must pass eligibility tests based on continuity of past income in order to qualify for investment. On some classes of securities and other investments there are limitations as to the proportion of a company's assets which may be allocated to that investment or limitations as to the proportion of a particular issue which a company may hold.

The general character of the legislation governing the investment powers of life insurance companies dates from the act of 1910 which implemented in important respects the Report of the Royal Commission on Life Insurance, 1906. The general changes since then have by and large served to relax the restrictions. The notable exception was the introduction in 1932 of a provision limiting a company's investment in common stocks to 15 percent of its assets.

A federally registered life insurance company in Canada may invest any portion of its assets in direct or guaranteed debt of the central, provincial or state governments of Canada, the United States, the United Kingdom and its colonies, and the Commonwealth countries and the countries in which the company is carrying on business. Similarly it may invest in the direct or guaranteed debt of municipalities or school corporations in Canada or other countries in which it conducts business. It may invest without statutory limit in bonds issued or guaranteed by the International Bank for Reconstruction and Development.

Corporation bonds secured by a charge on real estate, plant and equipment, or securities eligible for life company investment may be held without statutory limit as may equipment trust certificates of railways in the U.S. and Canada if they are fully and properly secured. In order for corporation debentures to qualify, the corporation issuing them must have paid dividends on its preferred or common shares at least equal to specified rates in each of the previous five years, or have had earnings in each of the five previous years equal at least to twice its annual interest requirements at the time the debentures are bought. A life insurance company may invest any portion of its assets in corporation debentures that meet these tests.

Preferred stocks of corporations may be purchased without statutory limit provided that the issuing corporation has paid dividends on its

preferred or common shares at least equal to specified rates in each of the five years preceding purchase by the life company.

The purchase of common shares by life companies is much more restricted by the legislation. Only the common shares of a corporation that has paid a dividend on its common stock of at least a specified rate in each of the preceding seven years is eligible for purchase. A life company may not hold more than 30 percent of the common shares nor more than 30 percent of all shares of any one corporation. Each life company must restrict the book value of its holdings of common shares to 15 percent of its ledger assets.

The companies may make collateral loans on the security of bonds, debentures, shares or mortgages that are themselves eligible for investment, and they may make loans on the security of life insurance policies issued by federally registered companies.

Life insurance companies may invest any portion of their assets in mortgage loans provided that in each case the loan does not exceed 60 percent of the value of the real estate covered. Mortgage loans in excess of 60 percent of the value of the real estate may be made if the excess is guaranteed by the government or an agency of the government of the country (or province or state) in which the real estate is located. Under the National Housing Act, the Central Mortgage and Housing Corporation guarantees loans made by life insurance companies as "approved lenders" which may exceed 60 percent of the value of the property to an extent which depends upon the designation of the borrower and the purpose for which the loan is to be used. Mortgage loans made by the life companies under the National Housing Act are insured to the extent of approximately 98 percent. The rate of interest on these loans is fixed by regulation and at the time of fixing is not to exceed the rate on long-term Government of Canada bonds by more than a specified margin (this margin varies with the purpose of the loan and the designation of the borrower).

In 1950 a new provision was introduced whereby a life insurance company may invest in real estate or leaseholds "for the production of income" in Canada or elsewhere where the company is in business, either alone or with another company, if (i) the lease is to or guaranteed by a corporation whose stocks, either preferred or common, are eligible investments, (ii) the net revenue from the lease is sufficient to give a reasonable return and repay at least 85 percent of the amount invested within the term of the lease, but not exceeding thirty years, (iii) the total investment in any parcel or leasehold does not exceed one-half of one percent of the company's ledger assets, and the company is authorized at any time to sell it, or to do anything with the property or leasehold that any owner might do with it. The total amount that a company may invest in real estate or leaseholds for the production of income is limited to 5 percent of its ledger assets.

Under the National Housing Act a life company may, to the limit of 5 percent of its assets in Canada, either itself, or in conjunction with other companies invest in the purchase of land and the construction thereon of low or moderate cost rental housing and other buildings (apart from hotels) necessary for providing community services. The project requires approval and to this end detailed specifications must be submitted including an estimate of the earnings. To be acceptable the estimated earnings must be sufficient to pay at least 6 percent on the investment and to amortize the cost of the project, apart from the cost of the land, within the useful life of the project or 50 years. It is provided further that if the net yield to the company or companies should in any year fall below 3 percent per annum of the cost over the useful life of the project, the Minister of Public Works will reimburse the companies to the extent of the deficiency provided the companies pay over to a reserve account all net earnings in any year in excess of 7 percent.

In 1948 the so-called "basket clause" was introduced in the acts governing federally registered insurance companies. By this clause the companies were authorized up to a limit of 3 percent of their total ledger assets to invest in bonds, shares, and debentures not otherwise eligible for investment and to invest in real estate or leaseholds for the production of income in Canada or other countries where they do business without having to meet the conditions that the lease be to a corporation whose stocks are eligible investments and that the net revenue be adequate to return at least 85 percent of the investment within 30 years. The total investment in any one parcel of real estate or any one leasehold under the "basket clause" may not exceed one-half of one percent of the book value of the ledger assets of the company. The "basket clause" does not enlarge the powers to invest in mortgages nor does it remove the limitations on the proportions of common shares and total shares of any one corporation that may be held by a particular life company. The limitations to 15 percent and 5 percent of ledger assets respectively of investments in common stocks and real estate for the production of income are overriding limitations and pertain to holdings under the "basket clause" as well as other clauses.

From the figures given above on the distributions of assets it will be seen that the life insurance companies in Canada generally, have not invested in common stocks nor in real estate for the production of income up to the limits of their statutory authority. It is thought that the "basket clause" has been used largely as authority for the acquisition of assets expected soon to become eligible investments.[63] At the end of 1956 investments of Canadian companies under the "basket clause" amounted to 1.38 percent of their total ledger assets. Of the $90.5 million of assets

63 In the brief to the Commission submitted by the Canadian Life Officers' Association in March 1956 it is stated that "an important function of the 'basket' clause is to permit a company to anticipate the later qualification of an investment originally made under it", pp. 43-44.

held under this clause, one-tenth was in stocks, one-third in real estate and the rest in bonds.

(ii) Valuation of assets in official returns

It is required in the Canadian and British Insurance Companies Act that in every annual statement to the Minister of Finance each company shall value its securities so that the total will not exceed the sum of the amortized values[64] of redeemable securities issued or guaranteed by the Government of Canada and its provinces, by the Government of the United Kingdom and by the Government of the United States and the market values[65] of all other securities. It is however further provided that if the Superintendent of Insurance reports to the Minister of Finance that market values are unduly depressed, the Minister may authorize the use of values in excess of market values, but not exceeding the values used in the next preceding annual statement, or in the case of securities acquired since the date of that statement, not exceeding the book values at the date of the statement to be filed.

With respect to a company's investments in real estate and mortgage loans, the Superintendent is authorized to procure a special appraisal of the value of the asset or the security for the loan if he deems this desirable and to write down the value of the real estate or mortgage loans in accordance with the special appraisal, in his report to the Minister on the company's affairs.

These statutory regulations governing the investment powers of the life insurance companies and the valuations to be placed on their investments are the legal framework within which the companies must operate in channelling the funds from policyholders and annuitants and from past investments, to seekers of funds in the capital market.

(b) Relative yields of financial assets

There can be little doubt that life insurance companies are sensitive to relative yields of a variety of financial assets and to changes in these relative yields. Equally however there can be little doubt that life companies are very much less sensitive to relative yields of some financial assets. It will not be necessary to argue either of these points at great length.

Of course relative yields are not the only regulators of the flows of funds from insurance companies and the sensitivity of these intermediaries to changes in relative yields is conditioned by the influences of these

64 " 'Amortized value' when used in relation to the value of a redeemable security at any date after purchase, means a value so determined that if the security were purchased at that date and at that value, the yield would be the same as the yield with reference to the original purchase price".

65 " 'Market value' means the market value at the date of the annual statement or, in the discretion of the Superintendent (of Insurance), at a date not more than sixty days before the date of that statement".

other regulators. Nevertheless relative yields are very important regulators of the flows of funds from these companies. The entire operation of the life insurance company is predicated on the assumption that at least a minimum yield will be earned on their investments.

At the end of the World War II, the gross yield on the Canadian companies' investments was lower than it had been at any time in this century. This was mainly the result of the very substantial increase in relatively low-yielding Government of Canada bonds in their portfolios during the war. Over the post-war years the Canadian life insurance companies have raised the average yields on their investments very considerably (see Table 7.17). This has been done by reducing drastically their holdings of federal government bonds and by increasing their investments in other assets particularly mortgages and corporation bonds. Within the class of debts normally acquired by the companies, mortgages and corporation bonds have the highest yields.

There is much other evidence that the life companies are sensitive to changing yield differentials. For example, a study of the details of bonds purchased and bonds sold by individual companies, as reported in the annual reports of the Superintendent of Insurance reveals that within the same year particular companies are often both buyers and

Table 7.17

RATE OF RETURN ON INVESTMENTS, CANADIAN LIFE COMPANIES

Year	Gross Yield[a]	Net Yield[b]
1901	4.80	
1911	5.90	
1921	6.42	
1929	6.48	
1930	6.23	
1935	4.59	
1940	4.24	
1945	3.89	
1946	3.71	
1947	3.57	
1948	3.57	
1949	3.72	
1950	3.82	
1951	3.90	
1952	4.02	
1953	4.20	
1954	4.59	4.06
1955	4.74	4.18
1956		4.31

a Calculated according to the formula: gross investment income (including the increase in income due and accrued and investment expenses, investment taxes and depreciation of real estate) divided by one-half of: the ledger assets at the beginning of the year plus the ledger assets at the end of the year minus gross investment income.

b Calculated according to the formula: net investment income (including the increase in income due and accrued) divided by the average of the total ledger assets at the beginning and end of the year.

The formulae are those used in reports of the Superintendent of Insurance.

SOURCE: *Report of the Superintendent of Insurance for Canada, 1951*, Vol. II, p. xvi and subsequent reports.

sellers of the same issue of bonds. This activity is not confined to issues offered initially in that year but also extends to bonds that have been outstanding rather longer. This trading is of course restricted perforce to securities in which there are fairly active secondary markets such as issues of the federal government, some of the provinces and a few of the municipalities, public utilities and larger industrial corporations. There can be little doubt but that this trading is done with the intention of securing capital gains and higher yields. And incidentally, it may be remarked that on the whole it is good for the capital market that the companies contribute to the making of secondary markets in these securities.

We will cite one other example of the sensitivity of life companies to changes in relative yields. If we compare their investment activity in the year 1956 with the year 1955 in the light of changing yield differentials we find ample evidence of sensitivity to changing differentials.

In 1955 yields on Government of Canada 20-year theoretical bonds were fairly stable during the first half, they moved up slightly in the third quarter, and advanced substantially in the last quarter. In the first quarter of 1956 there was a falling off and then recovery, and in the second quarter yields were on the average higher than in the first. Throughout the second half of the year the yields climbed persistently. We do not have monthly or even quarterly figures for the yields on conventional new housing mortgage loans, but the Central Mortgage and Housing Corporation estimates that the average yield on such mortgages in 1956 was 6.47 percent as compared with 6.05 percent in 1955. On N.H.A. insured residential mortgage loans the maximum rate was 5.5 percent in January 1955, but it was 5.25 from February 1955 through February 1956 after which it was raised to 5.5 percent again where it remained for the balance of the year. Thus the excess of the conventional rate over the N.H.A. rate was higher on the average in 1956 than in 1955, and one may conjecture that this excess increased over the last half of the year as yields in the capital market generally were rising except for the ceiling on N.H.A. rates which remained fixed at 5.5 percent.

In Table 7.18 we show separately the gross value of conventional and N.H.A. mortgage loans for new residential construction approved by life insurance companies by quarters through 1955 and 1956. We note first, that on the average over each year the ratio of conventional to N.H.A. loans was substantially higher in 1956 than in 1955. Moreover we note that in each quarter of 1956 the ratio of conventional loans to N.H.A. loans was higher than in the corresponding quarter of 1955 and that this excess increased from the second quarter to the third and then again, this time very substantially, from the third quarter to the fourth. There was an absolute decline in N.H.A. loan approvals and an increase in conventional loan approvals in 1956 as compared with 1955. These

Table 7.18

GROSS VALUE OF MORTGAGE LOANS
APPROVED BY LIFE INSURANCE COMPANIES
1955 AND 1956

Year		Conventional Loans	N.H.A. Loans	Ratio of Conventional Loans to N.H.A. Loans
		Millions of Dollars		
1955	First quarter	34.1	48.3	.71
	Second quarter	27.6	108.1	.24
	Third quarter	49.0	73.0	.67
	Fourth quarter	46.5	41.8	1.11
	Total	157.2	271.1	.58
1956	First quarter	35.4	33.4	1.06
	Second quarter	45.0	109.2	.41
	Third quarter	64.3	66.4	.97
	Fourth quarter	45.0	18.0	2.50
	Total	189.7	227.0	.84

SOURCE: *Canadian Housing Statistics*, Quarter 1, 1957, Central Mortgage and Housing Corporation, Tables 16 and 17, p. 16.

figures seem to provide strong evidence that the life companies were sensitive to the growing excess of the yields of conventional over N.H.A. new residential mortgage loans.

There is further evidence of the sensitivity of the life companies to changing yield differentials in the changes in book values of bond and mortgage holdings of Canadian companies in 1956 as compared with 1955. Relevant data are summarized in Table 7.19. In 1956 as compared with 1955 the Canadian life insurance companies continued to be net sellers of Government of Canada bonds. The yield on these assets rose, but it rose less than on other assets and the disposals of these bonds were about twice as high in 1956 as in 1955. The investment by Canadian companies in Canadian provincial, municipal, public utility and industrial bonds rose by some 43 percent while investment in mortgages in Canada rose by less than 2 percent as measured by book value changes. This reflects the switch from N.H.A. loans to conventional loans noted earlier but it also reflects an increasing emphasis on bonds (other than Government of Canada bonds) relative to mortgages in the face of the much sharper rates of increase in the yields of these assets as compared with mortgages. Among the categories of assets for which data are shown in the table, the yield of municipal bonds showed the highest proportionate increase[66] yet the increase in this category of assets in 1956 was substantially less than in 1955. There are probably several reasons for this, but an

[66] The usefulness of the quoted yields of municipal bonds, based as they are on a small number of issues is limited by the facts that the variety of municipal issues is very wide and secondary markets in some very narrow.

important one must be that the rise in yields reduced the supply of new issues; net new issues of municipal bonds payable in Canadian dollars were down some 36 percent in 1956 as compared with 1955. The proportionate rise in provincial bond yields was almost as high as in municipal bond yields and there was a substantial increase in the investment in these assets. In 1956 the proportionate rise in yields of public utility and industrial bonds was somewhat less than in yields of provincial bonds, and the rate of increase in book value of holdings of utility and industrial bonds was also somewhat less than of provincial bonds. Within the group of

Table 7.19

A. YIELDS OF MORTGAGES AND SELECTED BONDS

Year	Bonds					Mortgages	
	Government of Canada 20 year theoretical	Provincial	Municipal	Public Utility	Industrial	N.H.A.	Conventional
1955 1st quarter.....	3.14	3.32	3.72	3.74	3.98	5.33	
2nd quarter.....	3.12	3.27	3.66	3.69	3.94	5.25	
3rd quarter.....	3.24	3.40	3.69	3.72	3.97	5.25	
4th quarter.....	3.35	3.68	3.92	3.86	4.09	5.25	
Average.........	3.21	3.42	3.75	3.75	3.99	5.27	6.05
1956 1st quarter.....	3.33	3.72	4.04	3.92	4.14	5.33	
2nd quarter.....	3.51	4.02	4.51	4.17	4.42	5.50	
3rd quarter.....	3.75	4.41	4.86	4.41	4.71	5.50	
4th quarter.....	3.93	4.88	5.34	4.97	5.19	5.50	
Average.........	3.63	4.26	4.69	4.37	4.61	5.46	6.47

B. BOOK VALUES OF SELECTED CANADIAN ASSETS OF CANADIAN LIFE INSURANCE COMPANIES

(millions of dollars)

Year	Bonds					Mortgages
	Government of Canada	Provincial	Municipal	Public Utility (ex Transportation)	Industrial	
1954.................	534.5	274.1	283.0	274.8	358.3	1,317.1
1955.................	469.4	266.7	323.6	282.0	380.5	1,568.0
1956.................	332.7	294.8	340.5	310.5	396.8	1,822.9
1955 minus 1954.......	— 65.1	— 7.4	40.6	7.2	22.2	250.9
1956 minus 1955.......	—136.7	28.1	16.9	28.5	16.3	254.9

SOURCES: Part A. *Canadian Housing Statistics*, Quarter 1, 1956, Table 37, p. 25 and Quarter 1, 1957, Table 29, p. 22. The bond yields are calculated from monthly figures which for Government of Canada bonds are as of end of given month and for others are for first day of following month. The Bank of Canada is the primary source for the government bond yields, McLeod, Young Weir & Co., Ltd., is the primary source for the other bond yields.

Part B. *Report of the Superintendent of Insurance for Canada, 1956,* Vol. I, pp. xx and xxi.

utility and industrial bonds however there were sharp differences; the investment in utility bonds was greater in 1956 than in 1955 while the investment in industrial bonds was less; we shall not delve into the extenuating circumstances which would explain this.

We do not wish to overstate the degree of sensitivity of life companies to changes in yield differentials; there are other regulators that effect their flows of funds. It does seem however that as among mortgages and bonds relative yields play an important role in channelling the flows of funds from the life companies. As between bonds or mortgages on the one hand and stocks or real estate on the other hand however, changing differences in yields are of very much less importance than other considerations in determining the flows of funds. We must now review some of these other considerations.

(c) Other Regulators

Under this heading we shall restrict our attention to a few of the conventional practices which play a role of some significance in the allocating of life insurance company funds. The conventional practices of fund seekers are of course relevant; the preferences of borrowers for short-term instruments when yields are high, the considerations (quite apart from taxes and relative yields) which lead corporations in some circumstances to prefer debt to external equity financing, the preferences of borrowers for instruments with liberal call features, these and other preferences of fund seekers limit the choices of life insurance companies. Here however we shall refer specifically to three conventional practices of the life insurance companies themselves.

It is a common practice for life insurance companies to hold assets in the various countries in which they do business, roughly in proportion to their liabilities in these countries. In some cases this practice is required by the laws of the lands in which business is conducted; in other cases the practice is a matter of deliberate investment policy. In part it represents a hedge against changes in exchange rates.

There are other ideas of portfolio balance which have an influence over investment policy. It is probably safe to say that most investment officers have fairly definite ideas in their minds as to how the portfolio of Canadian assets, say, should be divided as among Government of Canada bonds, provincial bonds, municipal bonds, corporation bonds, mortgages and so forth. It is hard to imagine how the officer could operate otherwise. This is not to suggest however that these ratios are held rigidly nor that from time to time new ideas are not given effect. Insofar as portfolio diversification is an objective of investment policy it does limit the responsiveness of any investor to changes in relative yields though it does not mean that marginal changes in their flows of funds will not be

made from time to time as relative yields change. If the objectives of diversification are not held in too rigid a form so that advantage may be taken of special opportunities in the market, they will not inhibit the marginal responses to changing yields so necessary for the successful working of the capital market. The writer has however heard of instances which arouse some apprehension. In one such instance an investment dealer has reportedly offered high-grade municipal bonds to a particular life company at what would be considered a good yield and received a reply to the effect that ordinarily the company would be pleased to take a share of those bonds but that at the particular moment Ontario Hydro bonds were available at a somewhat lower yield yet nevertheless a rather high yield for such bonds and that as the company's portfolio was rather lacking in Ontario Hydro bonds at the moment the company would prefer them to the higher yielding high-grade municipal bonds. We do not wish to exaggerate the significance of any such examples. As we remarked, they arouse some apprehension, but without close and prolonged contact with the investment transactions of the companies it is quite impossible to place them in perspective. We leave this matter then with the general observation that the companies necessarily operate with clear ideas as to the composition of the portfolio they wish to establish and maintain and that this practice need not be inconsistent with the requirements for efficient operating of the price system in the capital market if there is enough flexibility in the ideas to permit marginal responses to changing yield differentials. We have already contended that the life companies are responsive to changing differentials in the yields of assets within a fairly wide class.

There is however one view of investment policy held very widely in the life insurance industry in Canada which operates effectively and persistently to restrict investment in a particular class of assets. We refer to investment in corporate stocks and especially common stocks. We have noted that the Canadian companies hold some 3.6 percent of their assets in common stocks (less than one percent in Canadian common stocks) even though, under the existing legislation they are entitled to hold as much as 15 percent of their assets in this form. This low ratio of common stock holdings cannot be attributed to any fundamental lack of a supply of stocks eligible for purchase under present legislation, any more than the low ratio of stock holdings by American companies can be attributed to a shortage of such assets. It results from the fear of the consequences of the valuation requirements in the legislation especially in view of the experience in the early 1930's of the Sun Life Assurance Company which had invested over 50 percent of its assets in common stocks, and, more important, from an interpretation of the company's role as trustee of the policyholders' and annuitants' funds. We shall discuss this interpretation of the role of trustee at some length in the next section of this chapter.

(3) *Principles of Investment for Life Insurance Companies*

The Canadian Royal Commission on Life Insurance in its report in 1907 offered the following statement concerning the proper management and use of life insurance funds:

> "Your Commissioners have no doubt that accumulated insurance funds are, in every essential particular, trust funds. They belong to the policyholders and not to the shareholders. The directors are not in possession of them as trading capital in any sense or to any degree. They are not subject to trading risk. They are held in trust for investment and to be eventually paid to those whose moneys they are. Being trust funds the function of the directors in regard to them is the function of trustee. Once the subject is put upon this simple basis the criterion for determining the propriety of any particular dealing by the directors with these funds also becomes simple. Ought a trustee to do this with trust funds? Once this is recognized as the test all difficulty disappears."[67]

The present Superintendent of Insurance in Canada has referred approvingly to the following statement of the first Superintendent who took office in 1875:

> "The all essential principle of a life company is security and no speculative employment of the funds entrusted to it can be sanctioned".[68]

The Canadian Life Insurance Officers' Association in its brief to the Royal Commission on Canada's Economic Prospects placed security of principal and income first among the objectives of investment policy for a life company.

> "Life insurance assets are, in effect, trust funds held against liabilities that will mature over a long period in the future. The company must be able to meet these liabilities. Therefore the primary factor governing its investments must be security of principal and income."[69]

The Association went on to cite the attainment of "the highest possible interest rate consistent with safety"[70] as an important subsidiary objective and noted that "diversification helps to ensure security and a satisfactory yield on investments".[71]

The literature of the insurance industry, especially the actuarial literature, contains some very important discussions of the principles of investment policy, but this subject has not engaged the attention of the

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67 Report of the Royal Commission on Life Insurance, Ottawa, 1907, p. 167.

68 Year Book of the Canadian Life Insurance Officers' Association, Proceedings of the Sixty-first Annual Meeting, 1953-4, p. 32.

69 Submission to the Royal Commission on Canada's Economic Prospects of the Canadian Life Insurance Officers' Association, March 1956, p. 29.

70 *Ibid.*, p. 29.

71 *Ibid.*, p. 31.

leaders of thought in the industry as continuously as some other subjects. As a consequence it is still in need of clarification and theoretical development. In very recent years, there has been a noticeable revival of interest however, and several important papers have appeared.

In 1862, A. H. Bailey, in a paper before the Institute of Actuaries in England cited five famous principles of investment that were upheld in several British actuarial papers (though criticized in some of the recorded discussion of them) and in 1948, J. B. H. Pegler, also appearing before the Institute could write: "Bailey's canons, particularly the fundamental conception expressed in the first and second, remain enthroned as the basis of the orthodox doctrine . . ."[72] Pegler went on to criticize the canons and to substitute new ones in the first of a series of recent papers on investment in the actuarial literature.

Bailey's first two principles were: "1. That the first consideration should invariably be the security of the capital; 2. That the highest practicable rate of interest be obtained, but that this principle should always be subordinated to the previous one; the security of the capital." Pegler quarrelled with the attempt to distinguish capital and income and hence with the priority of the aim of security of capital over maximization of income. He proposed an alternative principle which he felt reconciled the two conflicting principles in Bailey's first two canons: "It should be the aim of life office investment policy to invest its funds to earn the maximum 'expected' yield thereon" (p. 181).

H. G. Clarke, appearing before the Institute in 1954, argued that while Bailey's priorities could not be defended, Pegler's substitute principle could not be accepted either "because the conflict between yield and security is fundamental to the whole problem of investment and any principle which does not give recognition to this conflict will be misleading and dangerous to apply". Clarke therefore proposed as his first principle that "the aim of investment should be to secure the maximum 'expected yield' with the minimum error, having due regard to the nature and incidence of the liabilities".[73]

The last phrase in this principle is worthy of emphasis as it reflects another important theme in the recent literature that perhaps began in 1933 with comments by R. J. Kirton[74] and which was given much more elaborate expression in 1953 in a very important paper by A. T. Haynes and R. J. Kirton.[75] This theme, on which there are many variations, is

72 J. B. H. Pegler, "The Actuarial Principles of Investment", *Journal of the Institute of Actuaries*, V. 74, 1948, pp. 179-195, especially p. 180.

73 H. G. Clarke, "A Broad Analysis of the Problem of the Investment of Life Funds", *Journal of the Institute of Actuaries*, V. 80, 1954, pp. 335-364, especially pp. 338-9.

74 On a paper by W. Penman, "A Review of Investment Principles and Practice", *Journal of the Institute of Actuaries*, V. 64, 1933, p. 387.

75 A. T. Haynes and R. J. Kirton, "The Financial Structure of a Life Office", *Transactions of the Faculty of Actuaries*, V. 21, 1953, pp. 141-197. The present writer has found this paper particularly helpful. He has also benefited greatly by studying an unpublished paper, *The Risk of Interest Fluctuations in Life Insurance Operations*, prepared by Tjalling C. Koopmans in 1942 when associated with the Penn Mutual Life Insurance Company in Philadelphia.

broadly to the effect that an important (though of course not the only) consideration in the investment decisions of the life company is the relation between the distribution over time of the company's net liabilities for cash payments (claims plus expenses minus premiums) and the distribution over time of the expected cash receipts from premiums, investment income and maturing assets. The main point of this theme which we wish to emphasize is that if the average term of the distribution of expected receipts is less than the average term of the distribution of expected payments the company or its policyholders and annuitants stand to lose from a fall in interest rates and to gain from a rise. Conversely, if the relation between the average terms is the reverse of that just stated, the companies stand to gain from a fall in interest rates and to lose from a rise. We shall devote the next several paragraphs to a theoretical, though for the most part non-technical, discussion of investment policies designed to minimize the risks of loss (or gain) from changes in interest rates.

The liabilities of a life insurance company are very long-term liabilities extending over a period of upwards of ninety years. Moreover with a rapidly growing company there are no net liabilities for cash outgo for the next 15 or 20 years, arising out of business presently in force. Now as time passes and the growing company takes in funds it must invest them at current rates of interest. There is no way around that. Moreover if rates have fallen the company cannot avoid making lower rates of return *on current investments*. In addition to investing funds currently received as premium and investment income however, the company will also have to reinvest such of its assets as mature in the current period. The shorter is the average time to maturity of its assets the higher is the proportion of its existing assets which the company will have to reinvest in any year. To put the matter another way, the shorter is the average time to maturity of its assets the larger is the proportion of its portfolio that is affected within any fixed period by a given change in interest rates. Thus the average earnings on assets will vary less for a company with predominantly long-term securities in its portfolio than for a company holding predominantly short-term assets. By placing an emphasis on long-term investments a company does not gain so much from rises in interest rates but neither does it lose so much from declines in rates. This does not mean of course that by following a policy of long-term investment a company will avoid showing a progressive decline in its average earnings on assets if interest rates follow a declining trend over a long period of years (or a progressive rise in its average earnings on assets in the case of a secular rise in interest rates). It means simply that short period fluctuations in average yields are minimized by following a policy which emphasizes long-term investments.

Suppose now that a company wished to adopt an investment policy which could ensure against losses or profits arising from changes in

interest rates. What are the theoretical possibilities of such a policy? It is somewhat easier to think first of the case of a pool of funds that has not been increasing and how the assets might be invested so as to insulate the policyholders or the company from changes in the rates of interest over the life of the existing contracts. If in such a case the assets are invested in fixed income securities with fixed maturity dates, in such a way that at each date in the future, investment income and receipts from maturing assets are together just equal to claims and expenses less premiums, then provided that there are no uncertainties about asset maturity dates, and provided that claims, expenses and premiums are as expected at each date, complete insurance against any or all changes in interest rates is secured as no further investments of the assets in the pool will have to be made. It will be noted that such a policy would require the company to hold some investments with a term to maturity as long as the longest term liabilities, perhaps 90 years. If the company under consideration continued to write just such an amount and kind of new business as maintained the total pool of funds under administration at a constant level, then the protection against changes in interest rates could be maintained by continually selling shorter term assets and using the proceeds to buy very long-term assets. It will be noted however that changes in the relationships among the yields of securities of different maturities — the so-called structure of interest rates — will lead to profits or losses on these transactions, so that there is no insurance against changes in the structure of rates.

The company with a rising level of assets is much the more typical company in contemporary circumstances. The description of an investment policy designed to secure protection against the effects of uniform changes in interest rates is much more complicated in this case however. The complication arises from the fact that in such a company the business already in force will lead to a continuing increase in assets for some time to come. There are two general lines of approach to the problem of devising an investment policy to protect such a company against uniform changes in interest rates. In establishing the protection with respect to the business already in force by the first approach the company would use the assets already in hand to purchase medium and long-term securities which would yield income or mature in amounts just adequate to meet net liabilities for cash expenditure in each year of the period after the fund had again reached its present level. For the intervening period (while the fund was rising and then falling to its present level) the company would issue short-dated securities to mature in each year the pool was expected to rise in amounts equal to the excesses of cash receipts over expenditure in those years, and use the proceeds to purchase immediately somewhat longer term securities to mature in each year of the period while the pool was falling to its present level in amounts equal to the expected excess of claims and expenses over premiums in those years. Such a policy

would protect the company with respect to the business already in force against all changes in interest rates, whether uniform or not. If the company continued to grow by writing an increasing volume of new business, then to maintain protection, it would have continually to incur and increase short-term indebtedness and would have continually to sell assets of shorter term to buy assets of longer term. As in the former case the necessity to "roll the assets over", to convert short-term securities into longer term securities, precludes the achieving of protection against changes in the structure of interest rates.[76] It will be noted that protection against uniform changes in interest rates requires the holding of very long-term securities, and, in this approach to the problem, presumes that no assets will be held to maturity, indeed that there will be no assets in the portfolio maturing in less than (say) 10 years.

The second approach to assuring protection for a growing company against uniform changes in interest rates is more subtle. We shall eschew technical detail here, and offer the following heuristic explanation of the matter. The objective of this approach is to establish and maintain any portfolio so that the average term of expected receipts (including receipts from maturing assets) is equal to the average term of expected net payments. Suppose such a portfolio has been established. If the value of new business has been growing rapidly, since it may be expected that, with respect to the business already in force, the receipts will exceed payments for the next several years, then the balancing of average terms will require a concentration of long-term assets to counteract the effect of the relatively high receipts expected in the immediate future. Indeed these receipts can only be invested as they are received. However if interest rates fall uniformly the decline in the yield of these investments will be counterbalanced by the appreciation in the value of assets invested for a term longer than that of the liabilities they have to meet. Conversely if interest rates rise uniformly, the rise in the yield of the new investments will be counterbalanced by the decline in the value of assets invested for a term longer than that of the liabilities they have to meet.[77] Such a policy thus offers protection of existing business against uniform changes in interest rates[78] though not in general against changes in the structure of interest rates, since the maintenance of the protection requires conversion of assets. As new business is acquired at premiums or charges related to the then

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76 An alternative to the issuing of short-term debt is the selling of immediate annuities, or single payment policies.

77 For technical detail the reader is referred to Haynes and Kirton, "The Financial Structure of a Life Office, *op. cit.;* F. M. Redington, "Review of the Principles of Life Office Valuations", *Journal of the Institute of Actuaries,* V. 78, 1952, pp. 286-340, especially sections 3 and 4, and W. M. Anderson, "The Long View of Life Insurance Investment" *Proceedings,* American Life Convention 49th Annual Meeting, 1954, pp. 355-372. See also D. J. Robertson and J. L. B. Sturrock, "Active Investment Policy Related to the Holding of Matched Assets", *Transactions of the Faculty of Actuaries,* V. 22, 1954, pp. 36-65, and G. V. Bayley and Wilfred Perks, "A Consistent System of Investment and Bonus Distribution for a Life Office", *Journal of the Institute of Actuaries,* V. 79, 1953, pp. 14-50.

78 It must be remarked that if the fund has been growing sufficiently rapidly there is a theoretical possibility that it may not be possible to invest enough assets at long term (even in irredeemable securities) to equate the term of assets with the term of liabilities.

existing interest rates, the portfolio may be adjusted to secure protection of the total business against further changes in interest rates.[79]

We have discussed three varieties of investment policy designed to reduce the effects on the company or its policyholders and annuitants of changes in interest rates. The first policy was designed to minimize the effects of interest rate fluctuations; the other two were designed to immunize the company against the effects of uniform changes in the level of interest rates. In all three cases the policy involved substantial investment in very long-term securities. In general, to the extent that a company holds short-term assets it must counterbalance this block of short-term assets with a block of extra long-term assets if it is to reduce the effects of interest rate changes on the net costs of insurance and annuities, or on the profits of the companies.

There are of course many practical difficulties that would be encountered by a company seeking protection against fluctuations in the rate of interest in the ways described above. These are very formidable difficulties and they must not be minimized. First among them is perhaps the shortage in the capital market of fixed interest securities of the long terms required. A glance at the requirements and at the terms of the securities available convinces one that this is a real obstacle if one insists that investments be limited to fixed interest securities.

Another obstacle arises from the narrowness of the markets for some assets. Many municipal bonds and industrial bonds, not to mention mortgages cannot readily be sold without disrupting the market seriously. This is an obstacle to a policy that requires the steady conversion of short-term assets into longer term ones. This obstacle is also related to the first in that the portfolio must be the longer the greater is the degree to which assets are or have to be held to maturity.

Yet another group of obstacles arises from the existence of options associated with either the asset side or the liability side of the companies' business. On the asset side we have optional redemption dates of securities, especially but not only, corporate bonds and mortgages. It is impossible to know precisely what the mean term of a schedule of proceeds of assets is, if there is a wide band of uncertainty as to when debtors may decide to extinguish their debts. There are also options in the contracts the company offers that may be exercised against it and that impart uncertainty to any comparison of the mean terms of expected proceeds of assets and expected net cash payments. These are principally the policy loan privileges, the cash surrender options and the settlement options.

79 The reader should not of course assume, that if interest rates fall uniformly for an indefinite period or fall to a new low level and remain there a company could indefinitely postpone raising premiums on new business, by following an investment policy of the kinds outlined above.

Finally it is not possible to forecast the claims, expenses and taxes that will fall due at any date in the future. Expenses and taxes 50 years hence are especially difficult to forecast.

We began this section on principles of life insurance investment with several quotations emphasizing the role of the companies as trustees of the policyholders' and annuitants' funds. Let us now, in the light of the foregoing discussion, examine the interpretation of the trusteeship function implicit in the practices of life insurance companies in Canada.

A trustee may be regarded as one who manages assets according to rules laid down for him by the owners of the assets or on their behalf. The insurance contract is essentially an agreement to provide a number of dollars at a date or dates in the future subject to conditions and contingencies. If mortality tables were accurate, if costs of doing business were ever constant, and tax rates never changed and if protection could be had against risks of fluctuations in the yields of assets, the role of the company as trustee would be simple, unimaginative and passive. It would merely collect premiums from policyholders and annuitants, tend to the routine of investment and pay claims according to the conditions laid down.

However there are risks of many kinds to be encountered in the business. Accordingly we might think of the trustee of the policyholders' funds being charged to minimize the risks attendant upon the conduct of the insurance business. This point of view would draw support from the argument that the function of insurance is to reduce risks (of mortality by pooling them) and that the objects of policyholders would be frustrated if there were a substitution of (say) risks of interest rate changes for mortality risks. We have just been examining the nature of an investment policy that would offer some protection against risks of interest rate fluctuations. Presumably if Canadian companies interpreted their trusteeship function in the way just described we would observe asset distributions and portfolio management consistent to some degree with the requirements of such an investment policy and we would note persistent efforts on the part of the companies to eradicate or reduce the barriers to the carrying out of such a policy. What in fact do we observe?

In the first place we observe asset distributions that are exceedingly short. Whereas, with companies growing at the rate of the Canadian companies, protection against the effects of interest rate changes would require a portfolio in which the *average* term to maturity of the assets was of the order of 50 years, it is doubtful whether the average term of the assets of any Canadian company exceeds 25 years. In general, not only is there not a concentration of long-term assets offsetting the short-term concentration in mortgages and short bonds of various kinds, there are hardly any long-term assets at all in the portfolios. The fact of the matter is that the policyholders and annuitants of Canadian life companies

stand to lose if there is a general fall in the level of interest rates. In spite of the injunction of the first Superintendent of Insurance repeated in the quotation above from the present Superintendent, the Canadian companies have been speculating against a fall in the yields of assets. It may well be that at the beginning of the post-war period when yields were relatively low, it was a wise speculation that yields would be more likely to rise than to fall further in the forthcoming years. We would not debate whether this was wise speculation or otherwise; we would only insist that the maintenance of such a preponderance of short-term assets in the portfolios was indeed speculation.[80] It may be noted that as the post-war years passed by, and yields tended to rise, rather than lengthening the average term of their assets, the companies on the contrary, shortened the average term.[81]

There are of course very real obstacles to the adoption of an investment policy by the life companies which would secure some protection against fluctuations in yields of assets. We have been at pains to emphasize these obstacles above. What has been the attitude of the companies towards these obstacles?

On the matter of options in contracts relating to assets and liabilities, we can certainly find evidence in the insurance literature that companies do not like optional redemption dates for securities and indeed there is some evidence that insurance companies have encouraged the direct placement of corporate securities in the belief that such practice gives them more power in fixing the terms of the offering to their liking. On the other hand however, the options in the contracts issued by the companies have not appeared to grow any narrower in the past few decades.

The "narrow" market in many securities imposes an obstacle in that it prevents the conversion of assets from one maturity to another. It is difficult to see however that the insurance companies have taken a lead in pressing developments in the capital market that would reduce this obstacle. Their spokesmen have not been vigorous, at any rate, in making proposals for developing secondary markets in mortgages and wider markets for short-term bonds generally.

The obstacle to a hedging policy imposed by the absence of long-term fixed interest securities has also not been tackled vigorously by the companies. In the latter part of 1956 the federal government issued a bond with a term of 40 to 42 years. There may be technical considerations to explain it but the fact is that Canadian life companies showed very little interest

80 On the matter of reserves and cushions in the companies a few observations will be offered below but it must be observed here that whether such cushions exist or not is immaterial to the question of whether the companies are speculating. The point may be expressed as follows: a bet is a bet no matter what the resources of the bettor.

81 This fact has been elaborated upon in some detail in Wm. C. Hood and O. W. Main, "The Role of the Canadian Life Insurance Companies in the Post-War Capital Market", *The Canadian Journal of Economics and Political Science*, V. XXII, 1956, pp. 467-480, where it is concluded that ". . . improvement in the yield on their assets from 3½ percent to 4 percent has been painfully won at the expense of length of term." (p. 480).

in this security. One might have expected to hear arguments from the companies supporting the issue of longer term securities especially by governments including municipalities as well as senior governments. There have been such arguments no doubt, but they have not been stated and repeated with emphasis commensurate with the importance of the matter to the companies and to their policyholders.

There is a compromise with this obstacle arising from the lack of long-term fixed income investments in the capital market that is open to the companies. Corporation common stocks are, to all intents and purposes irredeemable securities. To be sure, they are not fixed interest securities though changes in the rate of dividends per share on the kinds of common stocks eligible as investments for life companies under present legislation are not frequent and are more often increases than decreases. There is no denying the fact that a stock is not a bond; to buy stocks instead of bonds in an attempt to secure protection against changes in the yields of assets is indeed a compromise with the requirements of the theory of the matter. But, as we have seen, even within the limits allowed by existing legislation, Canadian life companies have been exceedingly reluctant to make this compromise with the obstacle to long-term investment implied by the lack of long-term bonds for sale in the capital market.

If the insurance companies interpreted their trusteeship in the manner we have suggested, namely to conduct their affairs so as to minimize all risks of the business including risks of changes in interest rates, one might expect that they would not be so loathe to extend the term of their assets and to compromise with the difficulties of doing this at least to a somewhat greater extent within the limits of the legislation. Further one might have expected more leadership from the companies in attacking other obstacles to the pursuit of an investment policy consistent with this interpretation of their trusteeship. The conclusion to be drawn then, is that the companies have a different view of their trusteeship.

As matters stand at present the companies provide reserves and cushions against the various risks of the business. Indeed most companies write a great deal of "participating" business — some, in fact an increasing number, write only such business — and the premium loading in these contracts provides an extra cushion. This is a worthy interpretation of the trusteeship as no one would deny. However, it has the effect of placing upon the policyholder and the annuitant the responsibility of bearing certain risks of the business, which the companies might themselves reduce by more appropriate investment policy and by concerted effort to improve the opportunities for pursuing such a policy.

It can be argued that yet another view of the trusteeship would be reasonable in the circumstances. After all the companies do not sell merely term insurance; in fact they sell an investment service combined

in varying degrees with insurance against mortality risks. Indeed the vast bulk of their policies involves the collection of savings for investment and not merely fees for insurance. This being the case it is not unreasonable to interpret the function of the trustee rather more liberally than is done in the quotations cited at the beginning of this section, and in the Bailey canons of 1862 which these quotations so closely reflect, and to suppose that to attempt to make something more on investments than the yield figured in premium setting would be justifiable. Of course, on this view it would still be necessary to provide reserves against losses, to adopt a conservative attitude in fixing premiums, and to be prudent in selecting risks and in diversifying the portfolio. On the interpretation of the trusteeship that seems presently to be favoured by the companies the cushions provided by premium loading are directed partly against the risks involved in a short asset position. The modified view of the trusteeship suggested here would involve attempting to lengthen the average term of assets so as to release some of the cushion now provided. The cushion released might contribute partly to a reduction in the costs of insurance or it might be used wholly in support of a more active investment policy directed to the earning of higher yields on policyholders' savings. This modified view of the trusteeship would result in an increase in the proportion of corporate stocks in the portfolios of Canadian companies.[82]

E. Pension Funds

(1) *A Factual Review*

Pension funds may be invested through trust companies, investment companies, life insurance companies, unincorporated trustees or by private individuals. The amount of pensions paid annually by governments to older citizens and by employers or employer plans to retired employees has grown enormously in recent years. We shall be concerned here with pension plans that involve full or partial funding, that is accumulation of funds in advance to meet expected liabilities as it is these plans which yield pools of funds for investment in financial assets. Some of the larger pension plans, such as, for example, that embraced in the federal Old Age Assistance Act of 1952, are unfunded; very few plans are fully funded.[83] Even though many plans are unfunded and few are fully funded, the accumulation of funds over the last two decades has increased very rapidly, and pension funds are now a factor of considerable importance in the capital market.

We shall not undertake a comprehensive review of pension funds and their importance in the capital market in Canada. Some questions of

[82] We have concentrated on the risks of changes in interest rates in considering the interpretation of the trusteeship. The risks of increases in expenses are very real and important. It has been suggested that investments might be made in common stocks to the extent of seven or eight percent of assets for the purpose of securing more certain coverage of future administrative expense. See W. M. Anderson, *The Long View of Life Insurance Investment*, *op. cit.*, p. 367.

[83] A plan may be said to be fully funded if sufficient funds are in hand to provide all pensions earned to date by participants in the plan.

importance such as for example, the net effect of the growth of pension funds and of the spread of pension plans on private saving, personal and business, we shall not consider at all. We shall restrict our remarks to a brief explanation of the classes of pension funds in operation and an equally brief review of the limited information available on the assets of trusteed pension funds of incorporated companies.[84] Following that we shall refer to the features of the tax legislation that affect the flows of funds into pension accounts and that influence the investment of pension funds and conclude with a few observations on the principles of investing pension funds.

(a) Some characteristics of pension plans

(i) Employer plans for employees

Let us consider first the plans of employers for employees upon their retirement and take up plans for the self-employed in the following subsection. Pension planning is an exceedingly technical problem, and there are myriad variations in the details of pension schemes now in effect. We shall attempt only the briefest review of fundamental characteristics affecting the financing of these schemes.[85]

The provision of pensions for retired employees may be made with contributions either from the employer alone ("non-contributory plans") or from both the employer and the employees ("contributory plans"). In Canada, contributory plans predominate though to a lesser degree among large employers than among small.[86] In the United States, non-contributory plans are more common, especially among the largest employers.[87] Most plans resulting from collective bargaining negotiations are non-contributory.

The *formulae* used in determining benefits may, for the most part, be classified as of two basic variants: the money purchase formula and the fixed (definite or unit) benefit formula. Both in Canada and the United States, the larger plans are predominantly of the fixed benefit type.

The essential characteristic of the *money purchase formula* is that the contributions to be made by or on behalf of each employee in any year are stipulated by the plan and the amount of the pension deriving from that year's contributions is that which can be purchased then, or later, with those contributions. The contributions for both employer and employee are usually fixed as a percentage of pay. The benefit that can

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84 The latest compilation of information available to us pertains to the year 1953, and this information may well not represent the asset distribution of funds at the present time (spring of 1958) especially inasmuch as regulations governing the investment of the assets of trusteed plans has been changed in important respects since 1953. It is understood that a new official survey of pension funds will be undertaken shortly.

85 A most helpful study setting forth these and other matters in much greater detail than can be attempted here is Walter J. Couper and Roger Vaughan, *Pension Planning: Experience and Trends*, Industrial Relations Counsellors, Inc., New York, 1954. See also Dan M. McGill (ed.) *Pensions: Problems and Trends*, published for the S. S. Huebner Foundation for Insurance Education, University of Pennsylvania, by Richard D. Irwin, Homewood, Ill., 1955.

86 *Pension Plans and the Employment of Older Workers*. A report prepared for the Interdepartmental Committee on Older Workers, Department of Labour, Ottawa, 1957, p. 10.

87 Dan M. McGill (ed.) *Pensions: Problems and Trends*, *op. cit.*, pp. 77 and 80.

be purchased for any employee in any year thus depends directly on his salary but inversely on his age. The *fixed benefit formula* determines the annual pension payment as (a) a flat amount, (b) a flat amount times the number of years of service, (c) a fixed percentage of earnings or (d) a fixed percentage of earnings times the number of years of service. The last of these variations, often called the "salary-service" formula is the most common. The earnings used in calculating the amount of the pension under variations (c) and (d) may be the average of earnings over all years of service or the average over the last year or last several years of employment. The final earnings versions of the plan are being adopted to an increasing degree. The annual contribution of the employee is usually fixed as a percentage of salary. The employer is required to furnish the balance of the costs. The plans may be, and frequently are non-contributory.

> "The major disadvantage of fixed benefit plans (either without employee contributions or with fixed employee contributions) is that all unforeseeable increases in pension costs fall upon the employer. The correlative advantage is that every employee, if able to guess future earnings and service with reasonable accuracy, can look forward to a definite benefit (if the financial circumstances of the company continue to permit it). The theoretical advantage of money purchase plans is that the employer is protected against increases in pension costs and the employee thus has a slightly greater assurance of receiving some pension. The correlative disadvantage is that the amount of the employee's future pension is uncertain, since increases in costs may result in decreased annuities".[88]

The *media for the financing of pension plans* include trustees (often, but not exclusively trust companies) and the sellers of annuities, such as life insurance companies, or in Canada, the Government of Canada or the Government of Alberta. If pension contributions are paid to and invested by trustees, the trustees pay the pensions as they are earned, from the accumulated funds, but give no guarantee that the pensions can be paid. Trustees may be given full or limited discretion in the matter of investing the pension funds. If the pension contributions are paid to an insurance company or other seller of annuities, they may be used to pay the premiums on group deferred annuities. In this case the final pension of each employee is made up of the sum of the several annuities bought in each year of his service by the contributions on his behalf, and of course the insurance company or seller of annuities guarantees the payments.

There are many variations on these schemes. In the case of trusteed pension plans, the trustees may, at the time of retirement of each employee, purchase for him an immediate annuity, rather than continue to pay his annual pension, each year from the funds. A similar arrangement, referred

[88] Walter J. Couper and Roger Vaughan, *Pension Planning: Experience and Trends, op. cit.*, p. 57.

to as "deposit administration", may be made in the case of insured pension plans. Thus annual contributions may be deposited with an insurance company which guarantees to administer them and to buy immediate annuities for each employee as he retires. The insurance company usually guarantees the rate of interest to be earned by the fund for a given period and for the same or a different period, guarantees the applicable annuity premium rates. In some plans, arranged with insurance companies, the contributions are used not to buy group annuities, but to buy individual policies on the lives of each employee, that combine life insurance with an annuity.

In Canada, as in the United States, there are many more plans by which contributions, as they are made, are paid into insurance companies than plans operating through trustees. However, since several of the larger plans are "trusteed plans", this variety serves a larger proportion of employees. As of 1953, it has been estimated that 260 funds of incorporated industrial companies were of the trusteed variety and served some 390 thousand employees. There were then some 2,300 group annuity contracts outstanding with the life insurance companies under which 227 thousand individual certificates had been issued. With the federal government Annuities Branch (of the Department of Labour) there were some 1,400 group annuity contracts involving 159 thousand individual certificates.[89]

In both Canada and the United States, the trend is toward trusteed plans and the version of insured plans known as "deposit administration" and away from the conventional group annuity insured plan. Money purchase formulae are almost invariably used in connection with the conventional group annuity financing medium while fixed benefit formulae may be used in connection with any of the financing media we have mentioned.

The *method of accumulating funds* for the payment of pensions — the funding method — is germane to our considerations. We may conveniently distinguish two aspects of the matter: (a) the accumulating of funds to pay pensions in respect of service rendered to the employer before the adoption of the plan and (b) the accumulating of funds for pensions in respect of current and future service.

Under most pension plans the employer undertakes to contribute to the financing of pensions related to the service of the employee rendered before the adoption of the plan. The formula adopted for computing this liability is almost invariably of the definite benefit type (even if the formula pertaining to pension rights accumulated through current and future service should be of the money purchase variety). Most employers could not or would not wish to set aside at one time a lump sum sufficient to discharge

89 *Survey of Canadian Trusteed Pension Funds, 1953*, Reference Paper No. 54, D.B.S. Ottawa, 1955, pp. 10-11. There is some double counting in the figures given in the sense that for example one pension plan may involve several annuity contracts and some trusteed plans may purchase annuities. On the other hand the data for trusteed plans is restricted to plans of incorporated industrial companies.

this past service pension liability. Rather they choose to discharge it by setting aside a fraction of the liability each year over a period of say 20 years. In practice the funding of past service benefits is by no means universal or even the provision for funding during the period of active service of employees. In some cases of non-contributory funds, the employers make no effort at funding the plan, regarding the provision of pension payments to retired employees in any year as a current cost of that year's operations. In other cases no funding is undertaken until the date of retirement of a particular employee when funds are set aside to purchase an annuity for that employee equal to the total pension he is deemed to have earned.[90]

For several reasons the practice of funding past, current and future service liabilities is growing. In every contributory scheme, of course, the employee's contributions accumulate year after year and make for partial funding of the plan. The employer has several alternatives open to him in choosing the method of funding his liabilities. One method of funding the employer's liabilities for present service that is used almost invariably with insured conventional group annuity plans (whether these are based on the money purchase or definite benefit formula) is the *single premium or "step rate" basis* of funding. By this method, the cost of the pension deriving from the service of each employee in any year is met by paying a group annuity premium each year which will reflect the age-sex distribution of the employer's work force in that year. The essential feature of this method is that it provides for or buys pensions as they are earned. Usually therefore, there is no setting aside of reserves for changes in the liabilities per head of the work force deriving from changes in turnover, labour force composition and in salaries. The *individual level premium* basis of funding is one which bases the employer's annual contribution on the annual premiums, determined for each member of the plan individually, which will provide, at compound interest, the benefit to which his present salary and prospective years of service entitle him. The employer's total annual contribution may be adjusted to allow for turnover, labour force composition and salary increases. The method may be used with trusteed plans or insured plans operated on the deposit administration principle. It is not ideally suited however for funding plans in which pension benefits are directly related to final pay. For this purpose the *"level percentage of payroll" method* is especially suitable though it is also used for other forms of direct benefit pension schemes set up on the trustee or deposit administration plan. In applying this method it is almost essential to include estimated earnings changes in the initial calculations. The object of the method is to secure funding by contributing a constant percentage of payroll each year. The essence of the calculations involved may be expressed as follows. For each employee calculate the present value of

90 Variations of this case of so-called "terminal funding" may be found: a fund may be accumulated on behalf of employees over the last few years preceding their retirement, or over the first few years following their retirement or both.

his estimated pension benefits and divide this into the present value of his estimated earnings over the remainder of his working life. The result is the percentage of earnings which must be accumulated either by employee or employer contributions or both over the remaining years of service. The total employer contribution on behalf of all employees may be expressed as a percentage of total payrolls (it is indeed a weighted average of the percentages for the individual employees). An adjustment may be made to permit a cushion against the effects of turnover, changing labour force composition and other contingencies (apart from changing salary scales which have already been allowed for).

In this brief review we have referred to the sharing of contributions to private pension plans between employers and employees, the formulae for calculating benefits, the media for the financing of the plans, and the methods of funding the employers' liabilities. These characteristics of the plans are germane to our special interests in the capital market. We shall not review other aspects of the plans, their coverage and eligibility requirements and vesting privileges for example, though these have implications for the financing of the plans and from some other points of view are their most important features. Before offering information on the growth and distribution of the assets of pension funds, let us remark briefly on plans for the self-employed.

(ii) Plans for the self-employed

The self-employed, and any other persons, have always been able to buy annuities or invest for their later years in any other way they might choose. Recently however in Canada, in changes announced in the budget of 1957, the self-employed were granted a limited privilege of deducting contributions to accredited plans from their current income for the purposes of calculating their income tax liability. Accordingly several classes of institutions have developed plans to which the self-employed and others may contribute and which will be administered in accordance with these new income tax regulations. (Some of the details of these regulations will be cited below.) The Federal Government Annuities Branch of the Department of Labour has offered annuities under appropriately altered terms. Many of the life insurance companies have undertaken to alter the terms of existing contracts involving annuities and to offer new contracts in accordance with the regulations. Several of the trust companies have developed individual pension savings plans. The method of the trust companies has been to establish special funds in which individuals may buy units. The value of the units is converted into an appropriate annuity for the participant for the period of his retirement. Most trust companies have established more than one fund, for example a fixed interest securities fund, and a common stock fund, and the individual participant is permitted, perhaps within certain limits to select the proportions of his total

contributions that are to be invested in each fund.[91] Some investment companies have established or are considering the possibilities of establishing, possibly in conjunction with trust companies, plans suitable for the accumulation of retirement savings in accordance with the tax regulations.[92]

(b) The Assets of Trusteed Pension Plans

We shall review here only information pertaining to trusteed pension funds. Insured funds invested in group annuities or other life contingency contracts relating to pension plans are invested along with all the other assets of life companies and there is no separate information on assets of insured plans.[93] We gave information earlier in this chapter on the rate of growth of the group annuity business.

Our information on the assets of trusteed pension funds in Canada which is restricted to funds sponsored by incorporated industrial companies is, as we have mentioned, very much out of date. The survey from which the information is derived pertains to 1952 and 1953 and since then there have been several changes in the regulations and practices of trustees which may have been consequential. Of these changes perhaps two should be noted here. One is the apparent change in attitude of the income tax authorities with respect to the investment of funds in common stocks. Until 1956 the official policy of the authorities was to accord favourable tax treatment to contributions to those plans which undertook to invest their assets in accordance with the regulations incorporated in the Canadian and British Insurance Companies Act. Since that time, it is the impression[94] that the income tax authorities now impose virtually no restrictions on investment policies. The second important change is the development of new schemes by trust companies and by investment companies for the investment of pension funds. There is reason to think that an increasing proportion of the assets of trusteed pension funds may now be invested in the shares and certificates of investment companies. The trust companies have since the fall of 1955 developed schemes for the pooling of the reserves of different pension plans for investment purposes. The devices adopted are similar to those for the investment of contributions to individual savings plans. The companies have established two or more funds (each to concentrate on the purchase of selected classes of assets, such as government bonds, corporate fixed interest securities or common stocks). Contributions

91 In Ontario, for example, there has been some uncertainty as to the authority under which the trust companies may establish such funds. They appear to be of the nature of common trust funds, yet the investment practices desired for them are clearly inconsistent with the Ontario regulations governing common trust funds. In the declaration of trust or similar document under which the plan is registered it is expressly stated in many if not all cases that the company shall not be required to comply with the provisions of Section 76 of the Loan and Trust Corporations Act, R.S.O., 1950, Chapter 214, and Regulations thereunder, relating to the establishment and operation of common trust funds. The procedure has not been challenged, so far as this writer has been able to ascertain.

92 Investors Syndicate of Canada, for example, established in 1957 what it calls Registered Retirement Savings Plans, and also established its own Investors' Trust Company to administer these and other plans by which accumulated retirement funds may be invested in certificates or shares of one or more of the associated companies.

93 Although presumably the reserves could be calculated.

94 We shall refer to this matter below in the discussion of the regulators of the flows of funds.

to pension plans that are administered by trust companies may be used to purchase units of these funds, the proportions of the contributions to go into each fund to be decided upon from time to time by the employer if he chooses. These pooling arrangements are designed to benefit the smaller pension funds especially. The participants in them periodically receive audited statements of the operation of each pooled fund including details of investments held.[95] Another change since the last survey which has affected the investments of trusteed pension funds is the participation by the banks in the purchase of N.H.A. mortgages, some of which they have in turn sold, particularly to pension funds.[96]

The only figure we have on the growth of the assets of trusteed pension funds in Canada is the growth between 1952 and 1953. In this interval total assets of Canadian trusteed pension funds operated on behalf of incorporated industrial companies, increased by 16.5 percent, from $717 million to $835 million.[97] In the United States the assets of corporate trusteed pension funds increased by the following percentages in the years 1952 to 1956: 1952, 23.7 percent; 1953, 20.2 percent; 1954, 18.9 percent; 1955, 17.1 percent; 1956, 16.9 percent. At the end of 1956 the assets of these funds amounted to some $16.6 billion which may be compared with total assets of life companies in the U.S. of $96.0 billion and reserves in the corporate pension funds administered by life companies of $12.3 billion.[98] For both countries these are large rates of growth and substantial accumulations of assets.

The Canadian information shows that for 1953 Canadian corporate trusteed pension funds were invested in federal government bonds to the extent of 34 percent; other bonds, 50 percent; stocks, 7.5 percent; mortgages, 4 percent; and other assets, 5 percent. The information for the United States shows that for 1956, corporate pension funds were invested in U.S. government bonds to the extent of 14 percent; other bonds, 52 percent; stocks, 26 percent; mortgages, 1.4 percent; and other assets, 6 percent. (All figures in this paragraph are based on book values).

95 In Ontario, for example, as with the funds operated in connection with individual retirement savings plans, there is some uncertainty as to the authority under which the trust companies may operate these consolidated pension funds. They too appear to be of the nature of common trust funds, but the amount of the contributions to them and their investment practices are inconsistent with the Ontario regulations governing common trust funds. In the trust agreement between the company and the employer it is expressly stated in many if not all cases that the company shall not be required to comply with the provisions of Section 76 of the Loan and Trust Corporations Act, R.S.O. 1950, Chapter 214, or the regulations thereunder relating to the establishment and operation of common trust funds.

96 It is reported by the Central Mortgage and Housing Corporation in its 1957 *Annual Report* (p. 18) that in the years 1955 to 1957, $128.3 million worth of NHA insured mortgages were sold, mainly by banks, and for the most part to pension funds.

97 *Survey of Canadian Trusteed Pension Funds 1953,* D.B.S. Reference Paper No. 54, Ottawa, 1955.

98 Securities and Exchange Commission, Washington, D.C. *Statistical Series,* Release No. 1474 August 16, 1957. These United States' data exclude pension funds covering employees employed by railroads, banks and insurance companies.

2. *Regulators of the Flows of Funds*

(a) Tax legislation and regulations

Of course the legislation governing specifically the practices of insurance companies, trustees and trust companies bears to some degree on the investment of insured and trusteed pension funds. This has already been reviewed in a more general context however. In this section we shall consider only the provisions of the Income Tax Act and the regulations thereunder, that affect the establishing and administering of pension funds.[99]

The essential provisions of the Income Tax Act affecting pension plans are those whereby contributors to pension funds, employers and employees, may within limits, deduct their contributions from current income in computing their current tax liabilities, if the features of the plans are approved by the tax authorities.[100] Regulations respecting many aspects of the plans must be satisfied before approval of the deductions may be secured. Let us consider first employer plans for employees.

The effect of the regulations governing employer plans has been to encourage the funding of pension liabilities though there are limitations placed on the contributions that may be made in respect of current service and on the amount and rate of funding of liabilities pertaining to past service. Until recently, the regulations also imposed significant restrictions on the investment practices of pension fund trustees.

Certain general requirements must be satisfied by any fund in order to be approved. Thus, contributions to the fund must be irrevocably set aside beyond the control of the employer; the fund must not operate so as to discriminate in favour of certain specific groups such as shareholder-employees, or executives, for example; the fund must provide for pensions only; and contributions must vest in the employee — employee contributions immediately — and employer contributions within a stated time.

The benefit formula must be stated precisely, though either money purchase or fixed benefit variations may be allowed. Employee contributions with respect to current service and with respect to past service are allowed and may be determined in one of several ways but in any event deductible contributions may not exceed $1,500 per year with respect to each of current service and past service. "The employer must make annual contributions to the plan for future service benefits in respect of the services performed by the employee during the taxation year."[101] The maximum deductible employer contribution that may be made with respect to the current service of any employee is $1,500. The employer may make

99 In June of 1950, the Taxation Division, Department of National Revenue, issued a *Statement of Principles and Rules Respecting Pension Plans for the Purposes of the Income Tax Act* which summarizes the relevant parts of the law. Although up to the end of May, 1958, it had not been reissued, it has become seriously out of date in several respects.

100 In the United States only employers may deduct contributions to pension funds from income in computing current federal tax liabilities.

101 Department of National Revenue, *Statement of Principles and Rules Respecting Pension Plans for the Purposes of the Income Tax Act. op. cit.*, pp. 11-12.

contributions in respect of past service. The plan must state the extent of such past service liabilities and the method of their funding (terminal funding of these liabilities may be allowed) but there are limits to the contributions in respect of past service liabilities that the employer may claim as deductions. These limits are complicated and will not be given here.

The income tax authorities have approved deferred profit-sharing plans as pension plans, contributions to which (by employers or employees) are deductible from income, within the statutory limits, for tax purposes. However, the regulations require that while employer contributions may be determined in relation to profits, they must be determined according to a specific formula that is not subject to annual change and which provides for a minimum employer contribution in every year whether profits are made or not.[102]

As has been stated above, trusteed pension funds were required to be invested according to the provisions of the Canadian and British Insurance Companies Act except that no part of the funds was to be invested in any obligations of the employer, or a parent or subsidiary company. Apparently these regulations have now been relaxed though the *Statement of Principles and Rules Respecting Pension Plans for the Purposes of the Income Tax Act* has never been revised and reissued. In the Budget Address of March 20, 1956, the then Minister of Finance announced "Over the past year my colleague the Minister of National Revenue and I have given considerable thought to the general requirements to which pension plans must conform in order to establish the right of tax deductibility for contributions. . . . Our decision is that we should remove the percentage limitations relating to equity investments so that trustees will be able to govern their own investment policies in the light of the particular pension requirements of the plans under their administration." The situation is not entirely clear even yet (some two years later) but apparently the authorities raise no objection to any investment policies whatsoever, save investment in an employer's own firm or its parent or subsidiaries, which is still not approved.[103]

In 1957 a new section of the Income Tax Act (Section 79B) was enacted permitting persons, including self-employed persons, to deduct from

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102 It may be noted that profit-sharing programmes that are not operated as approved pension plans are not encouraged under Canadian tax legislation. Under Section 79, the relevant section of the Act, all employers' contributions to the trustee are deductible from his income in the year in which they are made but the trustee is required to allocate contingently or absolutely, to employees participating in the plan, all contributions from the employer and all earnings by the fund, and the employees are required to pay income tax on these allocations. This may work considerable hardship on employees who may have to pay income tax on moneys they have not and may never receive, who may pay income tax on the capital gains of the funds under administration and who apparently are not eligible for a 20% tax credit for dividends from Canadian corporations received by the trustee on their behalf. On profit sharing plans in Canada, see G. O. Huggan, "Profit Sharing Plans in Canadian Industry", *The Canadian Chartered Accountant*, V. 69, 1956, pp. 236-242.

103 However if the pension contributions to an employer's plan are invested in units of common funds operated by a trust company which is the sole arbiter of the investment policy of the common funds, an employer's plan would not be barred from approval, solely because the common funds were invested partly in obligations of that employer or his parent or his subsidiary concerns.

income for tax purposes contributions to retirement savings plans approved for the purpose by the Department of National Revenue. There are of course limitations on individual contributions; a person may contribute up to 10 percent of earned income with a maximum of $2,500 annually, or, if he is a member of an employer's registered pension plan, he may each year contribute the difference between his contribution to the employer's plan and the lesser of $1,500 or 10 percent of earned income. The general features which the plans must exhibit in order to be registered for the purpose of tax concessions are the following: the plan may not provide any benefit save an annuity payable in equal periodic instalments to the member, or jointly to the member and his wife or their survivor; the plan may not permit borrowing against the fund, surrender or assignment of the annuity or recovery of contributions other than through receipt of annuity payments (except in the case of death of the annuitant). As with employer pension plans benefits received are taxable in the hands of the beneficiary when received.

To the taxing authorities employer plans and individual retirement savings plans represent methods of deferring taxation. The drafting of the regulations has encouraged the establishment both of funded employer plans, and of plans for individuals. The regulations are however particularly slanted, so as to protect the government's revenues and as a consequence some inflexibility in the forms of plans and the use of the reserves has developed. The reserves in these schemes cannot be used as specific collateral for loans. They are not recoverable except in very limited ways. Investment in a registered retirement savings plan becomes one of the most illiquid of all investments. Does the preservation of the right to tax the sums in these funds require that their utilization be so narrowly circumscribed?

(b) Investment policy: principles and practice

In this section, we shall refer particularly to trusteed pension plans, inasmuch as investment policies of life insurance companies have been discussed at some length in Section D above. In discussing life company investment policy we argued that because of the very long terms of their liabilities, and because the growth in their business minimized the need to provide for early-maturing assets in the portfolio, life companies acting as trustees could properly invest large proportions of their assets in very long term securities. We argued further, that in view of the comparative shortage of long-term fixed interest securities in the market, the companies acting as trustees, would include a very much larger proportion of common stocks in their portfolios than they do at present in Canada. All of these arguments pertaining to life companies apply *a fortiori* to the investment of trusteed pension funds. There are in addition other powerful arguments especially favouring the

choice of common stocks as the appropriate long-term investment medium for trusteed pension funds.[104]

The liabilities of trusteed pension funds are fully as long as those of the life companies on the average, and may be even longer since, for example, the age at which persons enter pension funds may on the average be less than that at which they enter into insurance contracts.

Moreover, except in those unusual cases in which the employer fails or otherwise goes out of business, pension funds covering employees will continue to exist and new members will continue to join the plan perhaps, indeed, at an increasing rate. It has been estimated that "in idealized conditions a newly instituted Fund for men aged 18 to provide pensions at 65 is likely to increase for over 40 years without new entrants, subsequently declining of course. With the same fixed number of entrants at 18 each year after the first, the Fund's maximum level is not reached until some 65 years from the outset, after which it remains level."[105] Thus, again as with life companies, providing that the trusteed pension plan is properly funded, ready availability of cash cannot be an important emphasis in the investment programme of such a plan.

Whereas the life insurance companies are under statutory obligation every so often to value their assets as at some particular period and show a state of complete solvency, trusteed pension funds are under no such statutory limitation and are on that account not required to worry about temporary declines in the market values of their assets. Accordingly they can feel freer to yield to the compulsion of their situation and invest substantial proportions of their portfolios in assets such as common stocks whose prices tend to be more volatile and subject to wider swings than those of short-dated fixed interest securities.

A great many pension plans, indeed an increasing number of them have adopted a benefit formula which relates benefits to the employee's earnings in the last year or years of his service. As a partial hedge against the effects of secular inflation of prices and wages, it cannot be denied that such a benefit formula is to the advantage of the employees. It can be particularly onerous for the employer however, and greatly strengthens the arguments for managing the portfolio so as to enhance the prospects for capital gain and in particular for including a very substantial proportion of common stocks in it.

Some life insurance companies in the United States have undertaken to issue variable annuity contracts by which the annuity payments received by the beneficiary vary directly with the cost of living in some prescribed manner. Pension plans have also been constructed on the

104 A very helpful discussion of pension fund investment policy is that by K. M. McKelvey, "Pension Fund Finance", *Transactions of the Faculty of Actuaries*, vol. 25, 1957, pp. 113-142, and the comments thereon, *ibid.*, pp. 143-165.

105 K. M. McKelvey, *Pension Fund Finance*, *op. cit.*, p. 118.

variable annuity formula.[106] When such contracts and plans are entered into it is all the more necessary to contrive to manage the funds so as to reap capital gains. The methods for seeking to accomplish this are the adoption of an active trading policy and the inclusion of a liberal proportion of common stocks in the portfolio.

We have referred to the fact that as of 1953 Canadian trusteed pension funds, operated on behalf of incorporated industrial employers, had invested about 7.5 percent of the book value of their portfolios in stocks. The American figure for 1956 is much higher, amounting to a little over a quarter of total assets at book values or a third of total assets at market values. With the change in the income tax regulations there is little doubt that this Canadian proportion will rise; theoretical reasoning would certainly conclude that it should. The smaller plans which normally would be unable to achieve the diversification necessary to justify investing a large proportion of the fund in stocks, will be greatly assisted in this respect by the methods of pooling pension funds for investment purposes developed by the trust companies and described above.

We should like to consider in some detail the responsiveness of pension fund investments to changes in the relative yields of assets, but the data on which to base a factual analysis are not available.

F. Concluding Observations

In this chapter we have considered several of the major non-banking financial institutions. In each case we have discussed first some of the facts concerning their assets and their operations and then some of the regulators of the flows of funds to them and from them. We have noted several places where we were hampered in pushing the analysis as far as we should have liked, either by the lack of data, or the inability to conduct research in the detail required.

In the discussion of trust companies, after reporting on the nature of the trust company business, the growth in the assets under their administration, and the asset composition of their company and guaranteed funds, we turned to the legislation governing their investment policy, particularly the Ontario legislation. In the light of our review of this legislation and in the interests of reducing the compartmentalization of the capital market by widening the investment opportunities open to specific blocks of funds, we have no cause to quarrel with the statement[107]

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106 One of the first and most widely known of these plans is that connected with the College Retirement Equities Fund operated in conjunction with the Teachers Insurance and Annuity Association and initiated in 1952. According to this plan premiums are contributed by and on behalf of the participants. Part goes to TIAA to purchase a fixed dollar annuity and part goes to CREF to purchase "accumulation units", i.e. shares in the Equities Fund, which vary in value with the assets in the fund. The participant may elect to devote ¼, ⅓ or ½ of his premium to the purchase of these units. Upon retirement the participant exchanges his accumulation units for a promise from CREF to pay him a fixed number of annuity units per month for life. The annuity units are revalued each year.

107 In an address to the Canadian Club of Toronto as reported in *The Globe and Mail* of Toronto, April 29, 1958, p. 22.

of Mr. J. G. Hungerford of the National Trust Company: "It is well known that many beneficiaries of estates have suffered severely as a result of the application of our outmoded investment laws. . . . Nova Scotia is the only province so far that has widened the investment powers of trustees. Let us hope that other provinces will follow her lead." We noted that the practice of granting wider discretionary powers to trust companies in wills is growing; this is desirable as a general principle. We noted also, that beginning in 1952 several trust companies have established common trust funds which also have the effect of permitting diversification of the holdings on behalf of specific trusts, and enlarging the range of assets in which estates, trust and agency funds may be invested. Subject to one or two exceptions we could not contend that trust companies in their investment practices are not responsive to changes in the differences in yields of financial assets, within the limits imposed by legislation, and the companies' concepts of good practice. But on the one hand the limits imposed by legislation are severe and on the other hand information on the investment of estates trust and agency funds — which constitute the vast bulk of the funds administered by trust companies — is exceedingly meagre.

The investment companies, or at least some kinds of them are newer to the Canadian scene and although their total assets are still small by comparison with those administered by some other classes of financial institutions, they are growing rapidly and will play a role of increasing importance in the capital market. Since apparently less is known generally about these companies we took some pains to identify them and to describe their activities. We described separately the certificate companies, the open-end companies, the closed-end companies, and the non-resident-owned companies. The assets of all of these companies at the end of 1956 totalled some $1 billion; the closed-end companies have grown least rapidly. The tax legislation has been of very great importance in promoting the formation of these companies and the flows of funds to them and in influencing their investment policies. While the portfolios of the companies show significant differences, considered as a whole the companies, apart from the certificate companies, invest preponderantly in stocks. As has been explained, the non-resident-owned companies cater especially to those investors in the United States who wish to take advantage of certain differences between the tax laws of Canada and that country, and in so doing induce a significant flow of long-term capital to Canada in quest of yield and capital gain but not control of enterprises. There can be little doubt that the growth of investment companies has permitted the funds of many smaller investors to flow into a longer, more diversified list of assets and in this sense has served to increase the responsiveness in the market to changes in yield differentials inasmuch as the professional investment managers operating these companies are themselves cognizant of yield differentials and are

within the limits imposed by tax laws and their own investment objectives, sensitive to these differentials.

The bulk of this chapter has been devoted to the life insurance companies. In discussing these companies we reviewed some of the facts concerning their assets and liabilities in Canada. We noted features of the changing distribution of their assets such as the decline in their holdings of government bonds and the rise in their holdings of mortgages and corporate bonds. We referred to the increasing role of group insurance and group annuities and the declining role of endowment insurance in their total business and stressed the implications of the very rapid growth in their new business especially in the post-war years. We considered their investment policies especially in the light of the fact that their assets would continue to rise for another 10 to 20 years even if no new business were written. We reviewed the regulators of the flows of the companies' funds. We concluded that by and large the companies are sensitive to changes in the differential yields of assets. We noted the ways in which the insurance companies acts regulate their investment programme and we commented on certain conventions guiding the companies in making investments. In a note on principles of insurance company investment we developed the theme that an alternative to the conventional interpretation of the companies' trusteeship was reasonable and that this alternative interpretation would result in an increase in the proportion of stocks in the companies' portfolios. In these final remarks we shall offer a few further observations on the legislation governing investment practice and on the holdings of stocks by the companies.

There seems little doubt that the legislative requirement that stock holdings be reported at market values operates to restrain the companies from investing in stocks to a greater degree. Insurance companies have failed and their failures have supported demands for legislation. However, in a business whose cash income would normally exceed its cash outgo for a decade or two even if it stopped doing new business, the problem of solvency becomes much more than a matter of liquidity. Of course at best, certification of solvency can only be a conditional statement; it implies that the affairs of the company seem to afford adequate protection against such adversities as can be contemplated at the moment. This is nevertheless a useful statement. It is a question however whether it is necessary to require that stocks never be valued at more than market value in order to judge the solvency of a company. Surely this can be judged if all details of the assets can be known, no matter how the assets are in fact shown in any particular statement to the authorities. It is just as possible and in some ways no less injurious to imply that a company is insolvent when it is not as to imply it is solvent when it is not. Both extremes are to be avoided; perhaps this can best be guaranteed by flexible rather than rigid valuation requirements. It must

constantly be borne in mind that there is little likelihood of the company being forced to sell its assets — soon in any event. The legislation might pay less attention to rigid valuation requirements, as it does in the United Kingdom, and the supervisory authorities might express more concern for the degree of protection against interest rate movements implied by the structure of the portfolio as a whole.

Although the present restriction of common stock holdings to 15 percent of the ledger assets is not at the moment an effective limitation on the companies' ability to hold stocks it might well become so if the valuation requirements of the legislation were changed and if the present view of the companies' trusteeship were modified. It is suggested that if this restriction becomes an effective limitation it should be raised substantially. An increase in the proportion of assets that may be held under the "basket clause" would also have the effect of giving the life companies more latitude to pursue an investment policy consistent with the modified view of the trusteeship suggested above.

Our examination of life insurance company investment policy has led us to the view that the companies, writing contracts in terms of fixed dollar amounts, could, as trustees of the policyholders and annuitants, include a larger proportion of equities in their portfolios both to lessen the risk of loss through adverse changes in the yields of assets and to enhance the earnings on their policyholders' savings. If the companies come to write so-called "variable annuity" contracts, then the proportion of stocks in their portfolios will have to be increased.

When all is examined, the conclusion must be reached that there is probably no institution or buyer of any kind more strongly placed for investment in stocks. Their funds are large, so that they can diversify widely, as they should. Their liquidity needs are virtually nil so that they need never be pressed to sell any particular security from their portfolios at an especially unfavourable moment.

However, no one would suggest that life insurance investment policies should be changed quickly in any significant way. If the views expressed in this chapter have any validity one might anticipate a gradual lengthening of the average term of life company assets, a gradual increase in the proportion of stocks in the portfolios and a general increase in the degree of diversity among the assets. While this writer does not subscribe to the view that there is an over-all shortage of stocks outstanding of a kind suitable for the portfolios of life insurance companies, abrupt changes in policy would needlessly raise special problems.

The life insurance companies in Canada have a creditable record of successful operations reflected in the very rate of growth of their business which has been the subject of special consideration in the above discus-

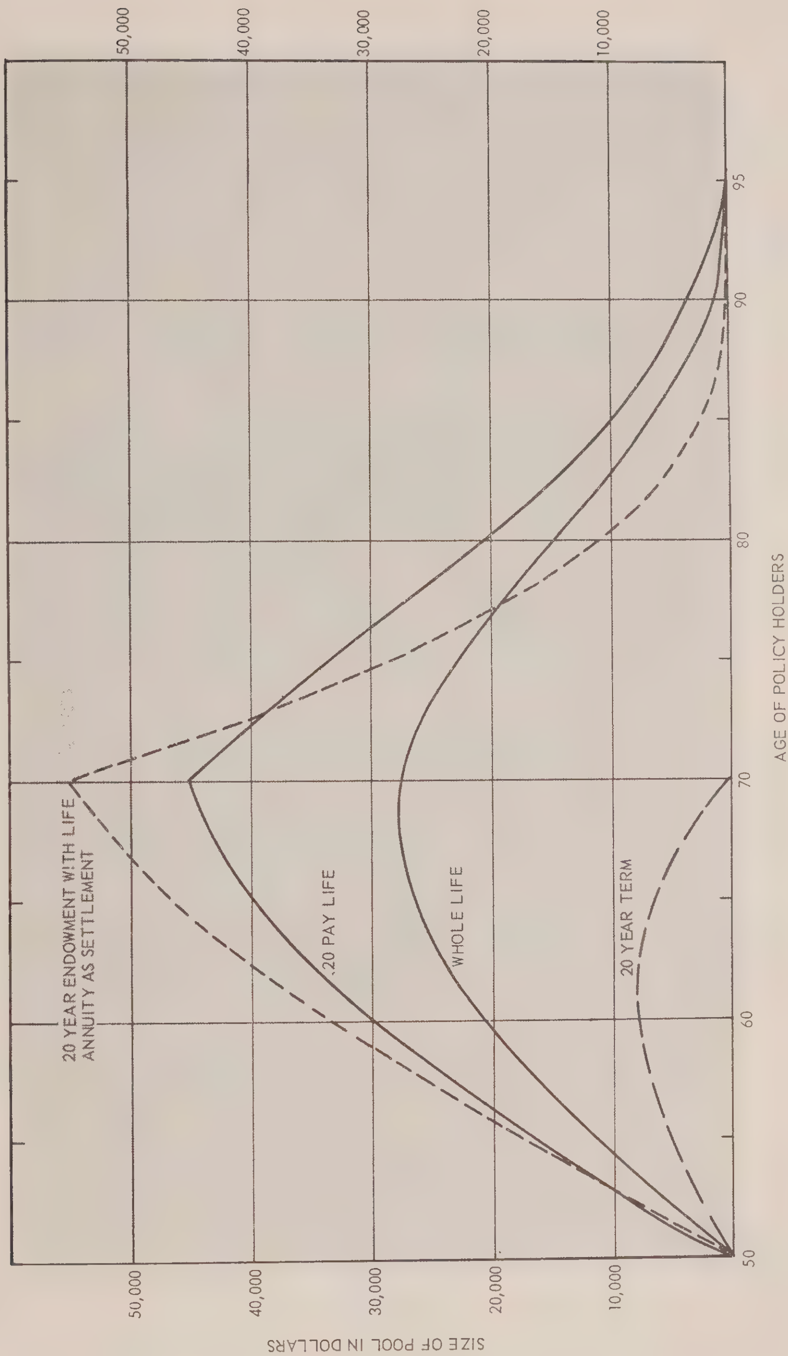
sion. But life insurance companies should be freer to select those investment policies deemed likely to serve best the interests of the policyholders for whom they act as trustees.

Our review of pension funds noted the very rapidly growing importance of these funds in the Canadian as in other capital markets. It is true that the very rapid rate of adoption of new plans cannot be maintained indefinitely and that therefore the contribution to the growth of these funds made by the funding of past service liabilities will gradually diminish in relative importance, but there are many reasons for believing that these funds will in total nevertheless continue to grow very rapidly. The funding of these plans has been fostered by tax legislation which permits both employers and employees, within limits, to deduct contributions from income in computing current income tax liabilities. A brief review of principles of pension fund investment policy led to the conclusion that a very large proportion of these funds should be invested in assets with prospects of capital gains. The income tax regulations do not now, except in one particular, restrict the investment policies of those responsible for trusteed pension plans, and the trust companies have been ingenious in devising pooling arrangements (in the face of what is apparently hostile legislation) permitting smaller as well as larger funds to hold a diversity of assets including common stocks. Developments in the field of pension funds in the last few years in Canada have been very largely in the direction of widening the range of assets into which pension funds may flow and in the light of the criteria by which we are judging the capital market this is all to the good.

In recent decades, although the proportion of gross income remaining at the disposal of the private sectors of the economy has diminished, an increasing proportion of current saving of non-corporate domestic savers has been channelled through financial intermediaries. On the whole this latter trend has probably meant that the allocation of private non-corporate saving to those who would use the funds to purchase real assets has been made with greater sensitivity to yields and prospective yields in the capital market. This is not certain; for there have always been many individual savers who were sophisticated investors, and financial institutions have been bound by law and custom in their investment practices. But within the limitations imposed by law and custom, the professional investor is likely to be more sensitive to yield differentials than the non-professional investor. In any event, the fact that an increasing proportion of domestic private non-corporate saving is now flowing through the financial institutions, adds significance to the suggestions that have been made in this chapter for changing the legislation and otherwise reducing the barriers that circumscribe the institutional investment managers in their responses to price or yield changes throughout the capital market.

While it is important to accomplish this, it is also important to see that the individual saver is not placed in an increasingly inflexible position by virtue of his increased propensity to direct his savings to the institutions. In a sense, and whether the individual saver is always conscious of the fact or not, in directing his savings to institutions he selects institutional investment managers. It is in the interests of proper working of the capital market that the individual saver be able to form an opinion about how successfully his investment manager is performing for him and be able without excessive cost to shift his funds and commitments from one institution to another. In some respects recent developments have been helpful in this regard and in some respects they have not. It has never been very easy for the individual policyholder to determine what is the cost of his insurance on the one hand and what yield he is making on the savings part of his policy on the other hand. This is in the nature of things; an insurance contract is more often than not a "package deal" in which the costs are not easily separable by anyone. In any event to surrender a policy with the intention of transferring the proceeds to another insurance company or to another investment institution has always been a rather costly procedure. Investment companies have become more prominent and it is somewhat easier to determine the yield being earned on an investment with one of these companies. While it is not costless to transfer funds from an investment company (as a rather substantial fee is charged at the time the investment is made) it can be done and probably more cheaply than one can transfer funds from an insurance company. Some investment companies are operated in association with others, and within the group of co-operating companies transfers of funds can be made without cost. On the other hand while the growth of investment companies has perhaps improved the over-all possibilities of judging investment performance and shifting funds, the growth of pension funds probably has not. Contributions to pension funds, by or on behalf of employees and other persons are usually irrevocably committed. It is true that in the case of trusteed employer plans, the employer may remove the funds from one trustee to another. In the case of the individual retirement plans recently encouraged by the income tax authorities, funds once committed cannot be recovered except as an annuity beginning at retirement age. There is no cash surrender option. This seems a high price to pay apparently for administrative convenience. We do not suggest that there should never be long-term commitments in the capital market nor that those who assist in or who are inconvenienced by transfers of assets should not be compensated. We do suggest that inflexibility of commitments should be avoided when possible, that costs of transfer should be minimized and that information germane to the question whether funds might profitably be transferred should be made as accessible as possible.

Chart 7.1



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8

THE BANKING SYSTEM AND THE MONEY MARKET

FOR PURPOSES of the discussion in this chapter we shall take the banking system to include the chartered banks and the Bank of Canada. In this volume we have already referred to many aspects of the functioning of the banking system in the post-war period. In other volumes and in articles, other writers have written much more about the banking system than about other financial institutions or the financing of particular sectors of the Canadian economy. For these two reasons this chapter will be shorter than some others and much shorter than the relative importance of the banking system would warrant.

Following the pattern established in earlier chapters, we shall refer first to selected characteristics of the banks, the Bank of Canada, and the money market. In the latter part of the chapter we shall discuss the banking legislation, the chartered banks and the price system in the capital market, and selected conventional practices of the banks. The impact of monetary policy on the banks and the money market will be discussed at the end of this chapter, but broader aspects of the working of monetary policy in and through the capital market will be reserved for the final chapter.

A. Selected Characteristics of the Canadian Banking System

1. The Chartered Banks

a) The structure of the chartered banking system

Commercial banks in Canada operate under authority vested in them by the Parliament of Canada through the Bank Act. The Bank Act is subject to revision every decade as are the charters of the banks granted by the Act. The last revision of the Act was in 1954. The provision for regular decennial revision of the Act, by enforcing periodic review of legislation and practices, has been a useful means of keeping

the legislation attuned to the changing requirements of the economy for banking accommodation.[1]

The capital required to establish a bank in Canada is large (it was set at half a million dollars by the Bank Act of 1870 and raised to one million in the revision of 1954). The number of banks in Canada has been progressively reduced by amalgamations; there were over 44 in 1880, and there are only 9 today.[2] The commercial banking system in Canada thus consists of a few banking organizations and many branch offices. The number of branches of each bank at the end of March 1958 is shown in Table 8.1. In addition to the 4,556 Canadian branches shown in Table 8.1, Canadian banks were operating 149 branches (including 4 sub-agencies) in other countries, particularly the West Indies, at the end of 1955.

Table 8.1

CANADIAN BRANCHES OF INDIVIDUAL CHARTERED BANKS AS AT MARCH 31, 1958

(Includes sub-branches and sub-agencies)

Royal Bank of Canada	830
Canadian Bank of Commerce	772
Bank of Montreal	727
Banque Canadienne Nationale	586
Bank of Nova Scotia	499
Toronto-Dominion Bank	494
Provincial Bank of Canada	346
Imperial Bank of Canada, Barclays Bank (Canada)	299
Mercantile Bank of Canada	3
Total	4,556

SOURCE: *Bank Directory of Canada*, Houston's Standard Publications Limited, Toronto, April 1958.

The branch system of banking offers many advantages. A large banking organization is able and often willing to establish banking services in growing localities before the time at which such services can become profitable. The branch system enhances the geographic mobility of funds. It is sometimes contended that if a large banking organization makes a practice of shifting employees among branches in diverse locations, the staff enjoys a breadth of training and experience not easily acquired otherwise. (On the other hand advantage may accrue to the small bank from the very direct concern of the chief officers who are often principal shareholders). The large bank with many branches may diversify risks and make proportionately larger business loans than

1 See C. A. Curtis, "History of Canadian Banking" reprinted from the *Encyclopedia of Canada* as Chap. II of *Readings in Money and Banking* (E. M. Rosengren, ed.), Toronto, 1947; A. B. Jamieson, *Chartered Banking in Canada*, Toronto, 1955, and R. Craig McIvor, *Canadian Monetary, Banking and Fiscal Development*, Toronto, 1958.

2 A new bank, The Mercantile Bank, was established recently in 1953. There have been two recent amalgamations, the Bank of Toronto with the Dominion Bank in 1955, the Imperial Bank of Canada with Barclays Bank (Canada) in 1956.

the small bank which must find its customers among relatively smaller borrowers. The concentration of bank management in a few banks permits a higher frequency of personal contact of central banking authorities with the chief officers of the commercial banks.

Reference to the concentration of banking business in a few organizations raises the question of the character of the competition among banks. The high initial capital required to start a bank in Canada, which has already been referred to, is one factor which makes it very difficult for new banks to become established to compete with those already established. Another factor is the inability of a new bank to offer its customers the considerable advantages (such as the privilege of having cheques cashed at par) of a far-flung system of branches. Among the existing banks there is however, keen and continuous competition though it takes the form more of competition in service for loan and deposit accounts, than of price competition. The opening of branches, sometimes in new areas before they can be self-supporting is an aspect of the competition among banks for deposit accounts. In recent years several banks have introduced special savings plans and budget plans to attract depositors, and bank advertising tends to concentrate on the deposit facilities rather than the lending facilities provided. The competition for deposits is evidenced by the fact that the threat to withdraw a deposit account may sometimes be useful to a would-be borrower. There is reason to think that beyond a point, the considerable increases in term lending on three occasions during the post-war period were somewhat grudgingly permitted by the banks, because they were unwilling to lose the accounts of threatening seekers of longer-term funds. On the other hand, the firms in this oligopolistic industry agree on the charges to be made for loans, and other services as well as the interest rates to be paid on personal notice deposits.[3] In a statement before the Banking and Commerce Committee of the House of Commons, the then President of the Canadian Bankers' Association declared that "The Canadian banks have for years entered into discussions and have reached understandings respecting charges for certain services." He further asserted that "discussions of charges which have taken place have almost invariably resulted in the bank which is willing to operate at the lowest charge setting the pattern for all the others." He concluded with the debatable contention that "the business of branch banking which services the entire nation, requires some basis of uniform minimum charges if it is to fulfil fairly and efficiently the requirements of the Canadian people."[4] It should

3 In this statement, non-personal notice deposits are deliberately excluded because, since December 1955, the banks have followed the practice of fixing the rate on such deposits in amounts of $100,000 and over, placed for 90 days or more, at ¼ percent below the most recent average Treasury bill tender rate. (See J. S. G. Wilson, "The Canadian Money Market Experiment," *Banca Nazionale del Lavoro Quarterly Review*, March 1958, p. 10.) It is of course likely that the decision to adopt this practice was reached jointly by the banks.

4 *Minutes of Proceedings and Evidence*, Standing Committee on Banking and Commerce of the House of Commons, No. 22, April 8, 1954, p. 1035. In the evidence of April 6, 1954, the same witness testified that agreement is reached among the banks as to the rates to be paid on deposits (p. 1002).

be remarked that the agreement that is arrived at in respect of charges for services is an agreement respecting minimum charges. Thus for example the prime loan rate is agreed upon among the banks, but in day-to-day practice there may of course be differences among the banks as to the classifying of loans as prime or otherwise. In the quotations cited above it is remarked that charges are "almost invariably" set at the lowest figure at which any bank is willing to operate. This remark leaves one rather uncertain as to whether, in the face of difference of opinion as to the desirability of a change,[5] decision may be delayed. Postponement of decisions in the face of disagreement may in some circumstances account for the apparent lack of flexibility in loan rates and deposit rates. But on this we shall have more to say below.

b) The liabilities of the chartered banks

We shall comment first upon the capital of the banks and then refer to their deposit liabilities. Approximately two-thirds of the shareholders' equity in commercial bank assets derives from the sale of stock and one-third from the retention of earnings.[6] For all banks together the ratio of shareholders' equity to total assets stood at 5.1 percent at December 31, 1957. This ratio for each bank is shown in Table 8.2.

Table 8.2

RATIO OF SHAREHOLDERS' EQUITY TO TOTAL BANK ASSETS
DECEMBER 31, 1957

1. Bank of Montreal	5.7
2. Bank of Nova Scotia	4.9
3. The Toronto-Dominion Bank	4.6
4. La Banque Provinciale du Canada	3.6
5. The Canadian Bank of Commerce	5.2
6. The Royal Bank of Canada	5.3
7. Banque Canadienne Nationale	4.2
8. Imperial Bank of Canada	4.9
9. The Mercantile Bank of Canada	7.7

SOURCE: *Canada Gazette*, Supplement, February 1, 1958.

In 1954 a change was made in the Bank Act which removed a major obstacle to the issue of bank shares. Formerly any issue of unsubscribed capital stock had to be offered pro rata to all existing shareholders. However, the securities regulations of some foreign countries called for the disclosure of information in addition to that required in returns to the Minister of Finance under the Bank Act. In the 1954 revision of the Act provisions were introduced that permitted banks to exclude residents of such foreign countries from offers of new issues of shares. Banks may, however, offer

5 Desirability of change will no doubt usually be related to the earnings position of individual banks and of banks in general. Competition among the banks can hardly be expected to be pressed to the point of placing any particular bank in the position of showing an overall loss; conversely the banks will be reluctant to show earnings that may appear unduly high.

6 This information derives from Exhibit No. 5 on page 787 of the *Minutes of Proceedings and Evidence* of the Standing Committee on Banking and Commerce, (House of Commons, 1954).

transferable rights to non-resident shareholders. Since 1954, several Canadian banks have issued additional shares of stock.

It is appropriate at this juncture to refer to the so-called "hidden" or inner reserves of the banks. These reserves are not shown explicitly as liabilities, but are deducted from the values of assets. They are hidden in that only the net values of the assets involved are shown. The principal classes of assets against which banks at present maintain inner reserves are loans and investments other than securities of the governments of Canada and its provinces. It has been the policy of successive governments in Canada not to require the banks to make public their inner reserves inasmuch as any particular changes in these reserves may be seriously misunderstood unless viewed with a trained eye in the perspective of their history and other features of the banks' position. Under Section 68 of the Bank Act the Minister of Finance has the responsibility to report to the Minister of National Revenue any transfers of income to reserves which he deems to be excessive, but the banks are free to transfer income upon which tax has been paid to reserves to the extent they choose. The formula used in 1954 by which the Minister of Finance decided upon reasonable transfers is public knowledge. There has been no public statement as to whether there have been changes except that in January 1957, the banks were required by order-in-council, to record their holdings of securities of the governments of Canada and its provinces at amortized values so that no inner reserves are now held against these securities.

As of the banks' fiscal year ends in 1953, about three-quarters of the holders of chartered bank shares were located in Canada and these holders held about three-quarters of the shares.[7]

Turning now to the deposit liabilities of the chartered banks we note first the obvious point that deposits are the principal liability of the commercial banks; at December 31, 1957, they constituted 93 percent of total liabilities. A rough order of magnitude of the relative importance of the various classes of deposits is indicated by the figures in Table 8.3. The figures pertain to December 31, 1957; there are of course substantial variations in some categories of deposits as for example deposits of the Government of Canada.

It is apparent from the table, that personal savings deposits, payable after notice, are, by far, the largest class of deposits in the Canadian chartered banks. In interpreting this figure however, it must be borne in mind that while legally the banks have the right to demand notice of withdrawal from these personal savings deposit accounts, they do not in practice require such notice, and depositors write cheques against these accounts. The recent introduction of personal checking accounts has not yet altered significantly the practice of many Canadian persons of

7 Exhibit No. 4 in *Minutes of Proceedings and Evidence*, Standing Committee on Banking and Commerce, House of Commons, 1954, p. 786.

Table 8.3

DEPOSIT LIABILITIES OF CANADIAN CHARTERED BANKS AS AT DECEMBER 31, 1957

	Percentage of total deposits
Deposits by Government of Canada in Canadian currency	3
Deposits by Canadian provincial governments in Canadian currency	1
Deposits by other banks in Canadian currency	1
Deposits by other banks in currencies other than Canadian	2
Personal savings deposits payable after notice, in Canada, in Canadian currency	46
Other deposits payable after notice in Canadian currency	4
Other deposits payable on demand in Canadian currency	31
Other deposits in currencies other than Canadian	12
Total	100
Value of total deposits ($ millions)	13,234

SOURCE: *The Canada Gazette*, Supplement, February 1, 1958.

using their savings account both as a checking account and as a vehicle for accumulating savings. The importance of personal savings deposits in the total of deposits reflects a fundamental feature of chartered banking business in Canada however. The chartered banks serve both as savings banks and as commercial banks in the more restricted usage of the latter term. Specialized savings banks are not as common or as large, relatively, as in some other countries such as the United States.[8] This fact, that chartered banks in Canada serve as repositories of savings deposits on a large scale, has important implications for their investment practices, present and potential, to which further reference will be made below. Interest is paid on these deposits.

The second largest class of deposits consists of the so-called "current account" deposits of persons, business and municipalities, comprising, at the end of 1957, some 31 percent of total deposit liabilities. No interest is paid on these deposits. The third largest class, foreign currency deposits owned by non-banking depositors, at 12 percent of total deposits, reflects the rather large business conducted by Canadian banks in certain other countries. Non-personal notice deposits payable in Canadian currency represent funds deposited at interest for specified intervals by businesses and some institutions and municipalities. Federal government deposits are distributed among the individual banks, in accordance with a formula worked out and revised from time to time by the banks. The formula presumably reflects in some way the volume of government business done by each bank.

[8] Mention may be made of other savings institutions, apart from chartered banks, trust companies, and credit unions which have already been referred to in this study. There is first of all the Post Office Savings Bank established under the Post Office Act of 1867 and having deposits at March 31, 1955, of $37 million. Then there are the Newfoundland Savings Bank, the Province of Ontario Savings Office and the Provincial Treasury Branches in Alberta having deposits at March 31, 1955, of $28 million, $73 million and $22 million respectively or $123 million in all. Finally there are the Montreal City and District Savings Bank and La Banque d'Economie de Québec established under federal legislation and having combined deposits at March 31, 1955, of $238 million.

c) The assets of the chartered banks

The total assets of the Canadian commercial banks are shown in Table 8.4. In Part A of the table, the Canadian and foreign assets of individual banks are shown separately. In Part B, the relative magnitudes of total assets and of Canadian assets in various broad categories (as indicated by the averages of month-end figures in 1957 and by the figures for the end of 1957) are shown. It is apparent from these figures that Canadian loans are by far the largest category of asset held by the chartered banks. This has not been the case throughout the post-war period. At the end of the war bank holdings of Canadian government bonds were almost twice as great as the value of Canadian loans.

The cash reserves of the chartered banks are, under the Bank Act, defined as the banks' holdings of Bank of Canada notes and their deposits with the central bank. In the revision of the Bank Act in 1954 the formula by which the required cash reserves are computed was changed. Before the revision each bank was required to maintain at all times cash reserves in an amount not less than 5 percent of its deposit liabilities payable in Canadian dollars. The banks in fact maintained their reserves at a figure substantially in excess of 5 percent of their Canadian deposits. They could not run their reserves down and maintain them at a figure close to 5 percent of deposits for fear that large unexpected withdrawals of cash would force the cash ratio below the legal minimum. By the formula adopted in the revision of the Act the banks are not required to maintain reserves above a specified minimum at all times, but only on the average over a month. The actual formula is rather complicated. For purposes of determining required reserves in any month, deposit liabilities and holdings of Bank of Canada notes are taken as the averages of these quantities at the close of business on the "Wednesdays in each of the four consecutive weeks ending with the last Wednesday but one in the preceding month." Deposits with the Bank of Canada are taken as the average of the deposits at the close of business on each business day of the current month. This formula permits the banks to adhere much more closely to the required minimum, which, since the revision, has been set at eight percent of Canadian deposits. With this formula, any bank is able to calculate at the beginning of a month, the *average* deposits which it will have to maintain at the Bank of Canada during that month. If at the beginning of the month its deposits are higher than will be required on the average, it can plan to reduce them over the month; conversely if at the beginning of the month its deposits are lower than will be required it must plan to build them up over the month. Thus within any month it is possible to witness an expansion of bank assets while bank deposits at the Bank of Canada are declining, or a contraction of bank assets while bank deposits at the Bank of Canada are rising. By the same token, the monetary authorities when contemplating the degree of ease or restraint to impose on the banking system within

Table 8.4

Part A

TOTAL ASSETS OF CANADIAN COMMERCIAL BANKS AS AT DECEMBER 31, 1957

($ millions)

	Canadian Assets	Foreign Assets[a]	Total Assets
Bank of Montreal	2,796	266	3,062
The Bank of Nova Scotia	1,133	295	1,428
The Toronto-Dominion Bank	1,325	129	1,454
La Banque Provinciale du Canada	283	4	287
The Canadian Bank of Commerce	2,285	363	2,648
The Royal Bank of Canada	2,946	866	3,812
Banque Canadienne Nationale	673	6	679
Imperial Bank of Canada	828	21	849
The Mercantile Bank of Canada	17	8	25
Total	12,286	1,959	14,244

SOURCE: *Canada Gazette*, Supplement, February 1, 1958.

Part B

PERCENTAGE DISTRIBUTION OF ASSETS OF CANADIAN COMMERCIAL BANKS

	Total Assets		Canadian Assets	
	Percentages based on averages of month-end figures for 1957	Percentages based on figures for December 31, 1957	Percentages based on averages of month-end figures for 1957	Percentages based on figures for December 31, 1957
Notes of and deposits with the Bank of Canada	5.9	6.1	6.8	7.1
Day-to-day loans	0.9	1.5	1.1	1.7
Government of Canada treasury bills	6.0	5.7	6.9	6.6
Government of Canada direct and guaranteed bonds				
(i) Maturing within two years	3.7	2.9	4.2	3.3
(ii) Maturing after two years	9.3	10.0	10.7	11.6
Canadian loans	40.1	38.0	45.9	44.1
Insured residential mortgages	3.9	4.1	4.5	4.8
Provincial government securities	2.0	2.0	2.3	2.3
Municipal and school corporation securities	1.3	1.2	1.5	1.4
Corporate securities	3.8	3.6	4.2	4.1
Other Canadian assets	10.3	11.3	11.9	13.1
Foreign assets	12.6	13.7	—	—
Total	100.0	100.0	100.0	100.0

a Detail may not add to total because of rounding.

SOURCE: Bank of Canada, *Statistical Summary*, January, 1958.

any month must reckon with the effect of this lag built into the statutory reserve requirements. Thus for example if restraint is called for and if the month opens with the banks holding deposits at the central bank in excess of reserve requirements, the measures adopted must take this into account. Similarly, if ease is called for and if the month opens with the banks holding deposits at the Bank of Canada in an amount less than is required, the central bank must take care that deposit reserves are supplied to the banks and on terms consistent with the general monetary policy. An example of this latter situation arose in the month of June 1958. In the period following the 15th of April, nearly all of the net new issues of government bonds, amounting to some $350 million was either taken up or financed by the chartered banks and in consequence there was a very substantial increase in the deposit liabilities of the banks. In June the figure to be used for deposit liabilities in calculating statutory reserves was $405 million higher than that for May. At the 31st of May the banks had deposits at the Bank of Canada of $541 million, and with the increase in "statutory deposit liabilities", faced the necessity of bringing their deposits at the Bank of Canada up to an average of $583 million over the month of June. This was at a time when, presumably, the monetary authorities would not wish to see any increased stringency in the money markets. There is no question that the Bank of Canada in such circumstances would be obliged to supply the reserves. But some methods of supplying them would tighten conditions in the money market while others would not. Of course, to put the matter another way, if the situation called for monetary restraint the central bank would still be obliged to supply reserves to the system and would be faced in the succeeding month with the fact of these increased reserves. The statutory requirement regarding calculation of required reserves thus introduces a lag of required reserves behind current deposit liabilities which not only complicates the interpretation of statistics but in some ways complicates the tasks of those managing the affairs of the central bank and the commercial banks.[9]

Ranking next to cash reserves in the order of liquidity of commercial bank assets are day-to-day loans (or simply day loans) and Government of Canada treasury bills. We shall discuss day loans more fully below. Suffice it to explain here that they are loans made to certain dealers in the government securities market to assist them in financing their inventories of Government of Canada treasury bills and short-term bonds. The Canadian banks have been making such loans since June 1954 when they were introduced as one of several innovations leading to the broadening of the market in short-term government securities. They are called day-to-day loans because they may be recalled or repaid within

9 From some points of view the task of the commercial banks is rendered easier by the change in reserve formula. These banks do not now have to maintain reserves on a daily basis, only on the basis of monthly average, and at any time in the month they are able to calculate their position and requirements quite precisely and promptly.

a day if notification is given by the lender or borrower before noon of that day, or on the following day if notification is given after noon.

As has been mentioned earlier in this volume, the banks entered into an agreement with the Bank of Canada in the fall of 1955 to maintain the total of cash reserves, day loans and treasury bills at an average monthly minimum of 15 percent of Canadian deposit liabilities from the end of May 1956 henceforth.[10] In practice the ratio has been maintained at a figure slightly above the minimum, as may be seen from Table 8.5.

Table 8.5

AVERAGE LIQUID ASSET RATIO OF CANADIAN CHARTERED BANKS

(percent)

	1956	1957	1958
January		16.2	17.3
February		17.1	16.9
March		17.1	16.5
April		16.6	16.8
May		16.6	18.1
June	16.2	16.7	
July	16.1	16.4	
August	16.4	16.5	
September	16.6	17.5	
October	16.4	17.3	
November	16.4	17.1	
December	15.9	17.2	

SOURCE: *Statistical Summary*, Bank of Canada.

Total holdings of Government of Canada securities by the commercial banks in 1957 averaged 19 percent of total assets. Holdings of treasury bills, and bonds maturing within two years averaged 9.7 percent or slightly more than half of the total holdings of federal government obligations.

Canadian loans constituted some 40 percent of the total assets of the commercial banks in 1957, and 46 percent of Canadian assets. In Table 8.6, the relative orders of magnitude of Canadian loans in various categories are set forth; the figures are percentages of the average values of Canadian loans at the end of each quarter of 1957. Personal loans, including loans to finance the purchase of Canada Savings Bonds, were 15.5 percent of total Canadian loans. Farm loans were slightly over 6 percent of total loans. Industrial loans comprised one-quarter of total loans and within this category loans to forest products industries; food, beverage and tobacco industries; iron and steel products industries; textiles, leather, and clothing industries; mining and mineral products industries; were largest in that order, each averaging over $150 million, or 2.8 percent of total loans. Loans to petroleum and petroleum products industries averaged $110

10 In computing the ratio for any month, holdings of Bank of Canada notes and Canadian deposit liabilities are calculated as the average of their values for the consecutive Wednesdays ending with the penultimate Wednesday in the preceding month. Deposits with the Bank of Canada, day loans and Treasury bills are calculated as the daily average value of holdings in the current month.

million or 2 percent of total loans. Loans to merchandisers are very important amounting to nearly 14 percent of total loans. Loans to construction contractors averaged some 5.4 percent of total loans and loans to grain dealers and exporters comprised some 7.6 percent of the total. Loans to instalment and other finance companies made up 6 percent of the total and call loans to brokers and dealers (excluding day loans) comprised just under 3 percent of the total. Four percent of the loans were made to municipalities, while just under 1 percent were made to provincial governments.

Table 8.6

DISTRIBUTION OF CANADIAN LOANS OF CHARTERED BANKS

(Based on averages of quarter-end figures, 1957)

Excluding day loans

	Percent
Personal loans	13.8
Farm loans	6.2
Industrial loans	25.0
Loans to merchandisers	13.8
Loans to construction contractors	5.4
Loans to public utilities, transportation and communication companies	3.2
Loans to other business	7.6
Loans to religious, educational, health and welfare institutions	1.8
Loans to provincial governments	0.9
Loans to municipal governments	4.1
Loans to stock brokers	1.5
Loans to investment dealers	1.4
Loans to finance the purchase of Canada Savings Bonds	1.7
Loans to grain dealers and exporters	7.6
Loans to instalment and other finance companies	6.0
Total	100.0
Total loans $ million	5,401.2

SOURCE: Table entitled "Chartered Banks: Quarterly Classification of Loans in Canadian Currency", p. 124, Bank of Canada, *Statistical Summary*, April 1958.

The Bank Act sets forth fairly explicitly the types of security which banks may take as collateral against their loans, and as has been mentioned earlier, successive revisions in the Act have enlarged the permitted scope of bank lending in keeping with the changing needs of the growing economy. There is a blanket provision in the Act (Section 75 (2) (d)) against the lending of money upon the security of real or immovable property, but there are now many exceptions to it. For example, the banks may make mortgage loans against residential property as approved lenders under the National Housing Act; the banks may take chattel mortgages as security for loans to individuals (Section 75 (6)), they may purchase mortgage debentures of corporations (Section 75 (5)); "where a debt or liability has been incurred to the bank in the course of its business, the bank

may subsequently take, hold and dispose of security of any kind for such debt or liability upon any real or personal, immovable or movable property", subject to certain technical exceptions (Sec. 78 (1)). The banks may make farm improvement loans against the security of the improvements; they may make loans to fishermen against the security of their vessels, loans to assist in the construction, repair and equipping of vessels against the security of the vessel, loans against the security of standing timber or rights to cut such timber, loans against the security of hydrocarbons "in, under or upon the ground, in place or in storage", or against certain rights respecting such security. These provisions and others are in addition to the traditional authorizations to "acquire and hold any warehouse receipt or bill of lading as security for the payment of any debt incurred in its favor", (Sec. 86 (1)) and to lend money "to any wholesale purchaser or shipper of or dealer in, the products of agriculture, products of the forest, products of the quarry and mine or products of the sea, lakes and rivers upon the security of such products" and "to any person engaged in business as a manufacturer, upon the security of goods, wares and merchandise manufactured or produced by him or procured for such manufacture or production". (Sec. 88 (1)).

All of the chartered banks in practice make personal loans, but one bank in particular, up to the time of writing has promoted this side of its business rather more than the other banks. The practices of this bank are of some interest inasmuch as their method of calculating interest charges leads to yields on those personal loans that are made through their Personal Loan Department substantially in excess of those apparently authorized under the Bank Act. Section 91 (1) of the Bank Act states that (subject to an exception in the case of loans of less than one dollar) "no bank shall in respect of any loan or advance payable in Canada, stipulate for, charge, take, reserve or exact any rate of interest or any rate of discount exceeding 6 percent per annum and no higher rate of interest or rate of discount is recoverable by the banks". This bank has explained its methods in some detail before the Banking and Commerce Committee of the House of Commons in 1954. We have no intention here of passing judgment on the legality of its methods. In brief, its procedure is as follows. If a person borrows \$120 for 12 months under the Personal Loan Plan, he receives \$120 less .06 x 120, or \$112.80 and is required to deposit in a savings account \$10 per month during the currency of the loan. The borrower receives interest on the minimum quarterly balance in his savings account, semi-annually, at current rates. This bank has estimated that between June 1936 and October 31, 1953, the annual average percentage yield on net Personal Loan Plan loans outstanding was 10.46 percent.[11]

11 See Standing Committee on Banking and Commerce, House of Commons, *Minutes of Proceedings and Evidence*, Thursday, April 8, 1954, Appendix "C", especially p. 1103.

Before leaving the subject of bank loans let us mention the so-called term loans of the commercial banks. Most of the loans made by the banks are payable on demand and in any event within a specified interval, frequently 90 days. In practice these loans are often renewed in whole or in part and perhaps many times. The conditions of some loans, however, provide for an original maturity exceeding one year. In addition to this, some corporations negotiate directly with the banks for the sale to the banks of their corporate bonds or debentures maturing within a period exceeding one year. It has become the practice to refer both to loans with maturity over one year, and to the direct purchase of corporate securities with similar maturity as "term loans". As we have mentioned, particularly in Chapter 4, the banks entered into agreement at the suggestion of the Bank of Canada on three different occasions in the post-war period, to restrict the practice of making "large" term loans. The last occasion of such an agreement was at the end of November 1955 when "it was agreed that all banks would in general cease making new commitments for term lending".[12] "The banks agreed that they would refrain from making term loans (as defined) in excess of $250,000 to business corporations and likewise would not purchase directly from such a corporation its bonds or debentures or other securities."[13] "Their unavailed-of commitments to make term loans and to purchase corporate securities, which had been more than $400 million late in 1955, and more than $200 million at the end of 1956, declined to $50 million at the end of 1957."[14] "In February, 1958, the term-loan agreement was reviewed with the chartered banks and the maximum raised from $250,000 to $1,000,000."[15] We shall refer again, below, to some implications of term loans, the forward commitments they involve, and the agreements respecting them with the Bank of Canada.

While the banks have limited themselves through the term loan agreements in the ways in which they may acquire corporate securities, there is nothing in the agreement nor in the Bank Act to prevent them from acquiring the bonds, debentures and stocks of corporations in the public capital market. Moreover the banks may and do participate with others in underwriting and marketing corporation securities as well as the securities of some junior governments. Although their holdings of corporate securities did not increase in absolute amount during 1957, corporate securities averaged nearly 4 percent of total bank assets during 1957. Holdings of provincial government securities averaged 2 percent of assets and holdings of securities of municipalities and school corporations averaged 1.3 percent.

Canadian banks first invested in residential mortgage loans in 1954 following the revisions of the National Housing Act and the Bank

12 Bank of Canada *Annual Report, 1955*, p. 18.
13 Bank of Canada *Annual Report, 1956*, p. 33.
14 Bank of Canada *Annual Report, 1957*, p. 28.
15 *Ibid.*, pp. 28-29.

Act. They have no authority to invest in residential mortgages however, except as approved lenders under the National Housing Act, and all housing loans made by the banks are, like the NHA, loans made by all other approved lenders, insured to the extent of approximately 98 percent of their value by the Central Mortgage and Housing Corporation. In 1957, insured residential mortgages averaged nearly 4 percent of total bank assets. In Table 8.7 the annual value of residential mortgage loans approved, conventional and NHA, by various lenders is shown. The banks' participation in providing mortgage funds to finance new residential construction was highest in 1955 when they approved nearly one-half of all NHA loans and some 37 percent of all new residential mortgage loans. In 1954, 1956 and 1957, banks approved roughly one-third of new NHA loans and about 23 percent of all loans on new residential property. The 1957 figures reflect an increased value of new NHA loans by banks and CMHC and a decreased value by other financial institutions. We have already described in the last chapter the effect of the ceiling on NHA mortgage rates in deterring life insurance companies and other lenders, in 1956 and 1957. Special efforts were

Table 8.7

VALUE OF RESIDENTIAL MORTGAGE LOAN APPROVALS

($ millions)

Year	By Life Ins. Cos., Trust and Loans Cos., and miscellaneous lending institutions		By Banks	By CMHC	Total NHA Loans	Total Loans
	Conventional	NHA	NHA	NHA		
1954	180.3	305.8	158.5	26.0	490.3	670.6
1955	235.0	313.2	326.2	18.0	657.4	892.4
1956	254.9	267.1	158.4	19.9	445.4	700.3
1957	239.3	104.6	173.5	235.2	513.3	752.6

NOTE: The figures in this table refer to loans on new property.

SOURCE: Central Mortgage and Housing Corporation, *Canadian Housing Statistics*, Quarter 4, 1957, Tables 17 and 18, p. 21.

made by the Bank of Canada to induce the banks to make NHA loans in 1957 and we shall refer to this later. The increased participation by CMHC in 1957 was a result of the government's programme of providing government funds to finance low-cost housing construction. In this year most of the government funds were disbursed through approved lenders acting as agents for CMHC and the banks acted as agent with respect to about 35 percent of the agency loans in 1957.

Sales of insured mortgages are permitted under the National Housing Act so long as an approved lender continues to service the loans. Since 1954 the banks have sold an increasing number of insured mortgages.

Other approved lenders have sold increasing amounts of such mortgages but the banks in 1957 accounted for two-thirds of the value of all such sales as is indicated in Table 8.8. (Corporate pension funds have been the principal buyers, though in 1957, on their own account, corporations bought about half of the amount sold.)

Table 8.8

SALES OF INSURED MORTGAGES

Year	Total value of sales ($ millions)	Value of sales by chartered banks as a percentage of total value of sales (percent)
1954	0.6	100.0
1955	17.5	77.1
1956	49.6	68.3
1957	61.2	66.8

SOURCE: Central Mortgage and Housing Corporation, *Canadian Housing Statistics*, Quarter 4, 1957, Table 27, p. 26.

d) Earnings and expenses of Canadian Chartered Banks

Let us conclude this brief review of selected characteristics of the Canadian chartered banks with a reference to their earnings and expenses. The available data for the years 1955, 1956 and 1957 are shown in Table 8.9. In these three years, over half of the earnings were derived from interest charges on loans (63 percent in 1957) and between 20 and 30 percent from security holdings and transactions. The two largest items of operating expenses are interest on deposits and remuneration to employees; each was about 40 percent of total current operating expenses in 1957.

2. *The Bank of Canada*

We have referred at some length to the Bank of Canada in Chapters 2 and 4; the basic characteristics of the organization therefore require no extended review here. Bank of Canada policy has been discussed at several points earlier and will be further discussed in this and the last chapter.

The Bank of Canada was founded in 1935 as a privately-owned organization; in 1936 its capitalization was changed to permit the government to become a majority shareholder and in 1938 nationalization was completed. It operates under authority vested in it by Parliament through the Bank of Canada Act. The Minister of Finance who holds the Bank's shares on behalf of Canada, appoints the directors, of which there are twelve, with the approval of the Governor-in-Council. The directors with the approval of the Governor-in-Council appoint their chairman who is the

Table 8.9

EARNINGS AND EXPENSES OF CANADIAN CHARTERED BANKS

($ millions)

	Financial years ending in:		
	1955	1956	1957
Current operating earnings			
Interest and discount on loans	236.3	314.2	380.6
Interest, dividends and trading profits on securities	128.4	102.8	118.4
Exchange, commission, service charges and other current operating earnings	89.0	96.5	109.5
Total current operating earnings	453.7	513.5	608.5
Current operating expenses[a]			
Interest on deposits	105.2	129.1	183.4
Remuneration to employees	153.1	167.8	188.3
Contributions to pension funds	13.6	14.0	13.8
Provision for depreciation of bank premises	10.1	11.4	12.7
Other current operating expenses[ab]	70.1	77.5	86.0
Total current operating expenses[a]	352.1	399.8	484.2
Net Current operating earnings[a]	101.6	113.7	124.3
Less: Provision for losses and addition to inner reserves[c]	23.1	11.0	2.4
Less: Provision for income taxes[d]	37.2	41.7	56.6
Leaving for dividends and addition to shareholders' equity	41.3	61.0	65.3
Of which:			
Dividends to shareholders	26.2	31.9	35.4
Addition to shareholders' equity	15.1	29.1	29.9

a Before provision for income taxes and losses and addition to inner reserves.

b Includes taxes other than income taxes.

c After deduction of retransfers from inner reserves to undivided profits and rest account. Includes capital profits and losses and non-recurring items.

d Includes provision for income taxes on the taxable portion of additions to inner reserves and on that portion of the funds retransferred from inner reserves which had not been taxed previously. Includes foreign income taxes.

SOURCE: Bank of Canada *Statistical Summary*, January 1958, p. 12.

Governor of the Bank and its chief officer. The Governor is appointed for a term of seven years "during good behaviour" and is eligible for reappointment.

The question of the responsibility for monetary policy is of profound importance. The preamble to the Bank of Canada Act states that . . . . "it is desirable to establish a central bank in Canada to regulate credit and currency in the best interests of the life of the nation, to control and protect the external value of the national monetary unit and to mitigate by its influence fluctuations in the general level of production, trade, prices and employment, so far as may be possible within the scope of monetary action, and generally to promote the economic and financial welfare of the Dominion . . . .". There is nothing in the Act to suggest that officers

of the Bank should not themselves formulate and initiate the specific policies necessary for giving effect to the intent of this preamble. There is no explicit procedure laid down in the Act for resolving any differences which may arise between the Bank and the government over matters of policy. In 1941, the then Minister of Finance, Mr. J. L. Ilsley, stated in the House of Commons that " . . . . the monetary policy which the bank carries out from time to time must be the government's monetary policy, but the government must leave the carrying out of that policy, the choice of ways and means of executing it, to the management of the bank in whose judgment it has confidence. . . . In view of the statutory responsibility placed on the governor and the board of directors, I do not believe that those of them who disagreed with the government on a fundamental issue could conscientiously carry out the government's policy. It would therefore be necessary for them to resign . . . ."[16] The statement of the present Governor, Mr. Coyne, before the Banking and Commerce Committee of the House of Commons in 1956, places the emphasis somewhat differently.

> "The only action the management of the bank can take is that which they themselves believe is the proper action for them to take on their own responsibility.
>
> "I do not think it follows . . . . that because the government can bring about the removal of the governor of the bank therefore the governor of the bank must do whatever the government wants him to do. Nor does it follow in fact that the government expresses views of a kind that would require action by the bank contrary to its own views of what should be the appropriate monetary policy at that time. Certainly Parliament is supreme, and the government, having a majority in Parliament is in a position, if it thinks strongly enough about a matter, to bring about a change in the management of the bank. I feel that this is a very proper safeguard of the public interest. . . . This safeguard does not relieve the bank of its responsibility and it does not alter the fact that normally I think you would expect the bank to take the initiative in matters which properly fall within its own sphere. The bank is not in the position of daily receiving instructions — or indeed receiving instructions at all — from the government in those matters which by statute are assigned to the responsibility of the management of the bank.
>
> "If the government were determined that a different course should be followed, and were sufficiently convinced that it was necessary in the public interest, and defensible before public opinion, then a strong determined government could have its way."[17]

16 House of Commons, *Debates*, 1941 Session, p. 3936.

17 House of Commons, Standing Committee on Banking and Commerce, *Minutes of Proceedings and Evidence*, Tuesday, May 22, 1956, pp. 373-375.

There is no reason to suppose that at the present time the policies of the Bank are not being formulated and implemented in the manner described by the present Governor.

The day-to-day management of the Bank is conducted by an Executive Committee comprised of the Governor, Deputy Governor, one member of the Board of Directors, and the Deputy Minister of Finance. This latter officer is also a member of the Board of Directors *ex-officio,* but in neither body does he have the right to vote. There is however, in the Bank of Canada Act, this formal provision for day-to-day liaison between the Bank and the Department of Finance. While it is an important principle that the Bank should be free to implement monetary policies in the manner the Bank deems best, it is equally important that the working relations between the Bank and the Department of Finance be close.

The Bank of Canada Act provides that the Governor or in his absence the Deputy Governor, shall have the right to veto any action or decision of the Board of Directors or of the Executive Committee. In such an event, the Governor or Deputy Governor, as the case may be, is required to inform the Minister of Finance of the circumstances, and the Minister is required to submit the veto to the Governor-in-Council who may confirm or deny the veto. Any director or member of the Executive Committee has the privilege of submitting his views on the question at issue to the Governor-in-Council through the Minister of Finance. There is no public record of the exercise of the veto power under this section (Section 14) of the Act.

The Bank of Canada maintains its principal office in Ottawa, and agencies in all provinces save Prince Edward Island and Newfoundland where it is represented. Its chief agencies are in Montreal and Toronto which are the financial centres of the country. It is in Montreal and Toronto that the Bank's securities and foreign exchange brokers are located.

The liabilities of the Bank of Canada consist primarily of Bank of Canada notes and deposits of the commercial banks. At the end of 1957 these comprised 71.6 percent and 19.5 percent respectively of total liabilities. The Bank of Canada now has the sole right of bank note issue in Canada and as we have remarked, such of its notes as are held by the chartered banks together with the banks' deposits with the Bank of Canada comprise the reserves of the banks. The Government of Canada, the Quebec savings banks and foreign central banks also maintain deposits in Canadian dollars with the Bank of Canada.

The assets of the Bank of Canada are comprised very largely of Government of Canada securities; at the end of 1957 such securities made up 91.3 percent of the Bank's total assets. The maturity composition of the Bank's portfolio of Government of Canada securities varies from

time to time of course, with the changing maturity distribution of amounts outstanding and with the requirements of the Bank's monetary and debt management policies. The Bank is permitted by the Bank of Canada Act to hold the securities of provincial governments but rarely does and has not done so since 1947; it is not permitted to hold the securities of municipalities or of corporations. Occasionally the Bank makes direct temporary advances to the Government of Canada; more frequently it makes direct advances to chartered banks or to Quebec savings banks. The Bank also holds all the outstanding shares and debentures of the Industrial Development Bank, as we noted in Chapter 6. The Bank of Canada has both assets and liabilities payable in foreign currencies. While at one time the Bank of Canada was required to maintain a reserve of 25 percent of its note and deposit liabilities in gold coin and bullion and foreign exchange, this requirement was suspended in May 1940, under authority of the War Measures Act. The suspension has been maintained since 1952 under the Currency, Mint and Exchange Fund Act (Section 25), so that the Bank is not now required to meet any formal reserve requirements.

3. The Money Market[18]

The money market warrants description at this point as an integral part of central and commercial banking machinery. The Canadian money market nurtured by the Bank of Canada has, in the main, operated along its present lines since June of 1954. The assets involved are federal treasury bills with maturities up to 90 days and federal securities having three years or less to maturity. A group of thirteen brokers carry inventories of these securities which they sell to corporations and financial institutions (including banks to an increasing degree). The inventories are financed with very short and callable day loans from the banks and, sometimes, when day loan money is tight, with accommodation from the Bank of Canada in the form of sale and repurchase agreements. The development of this market has benefited those who buy the treasury bills, it has benefited the brokers because they earn some profit, it has benefited the banks by enabling them (in conjunction with the new reserve requirements) to use their cash more completely and efficiently, and it has benefited the Bank of Canada to the extent that the banks have kept a steadier cash position and to the extent that the broader dealings in treasury bills, including the emergence of other buyers for outstanding bills, in this market has given the Bank a freer hand than formerly to conduct its operations in this market on its own initiative and without thereby inducing sharp changes in prices.

[18] The Canadian money market has been recently and exhaustively described by J. S. G. Wilson in "The Canadian Money Market Experiment", *Banca Nazionale del Lavoro Quarterly Review*, No. 44, March 1958, Rome, pp. 19-55. We have drawn freely and extensively on this description in the much more abbreviated account given in this chapter. Reference may also be made to the following publications by R. M. MacIntosh:

(i) "Broadening the Money Market" in *The Canadian Banker*, Autumn, 1954.

(ii) "The Day to Day Loan Market in a Year of Easy Money" in *The Canadian Banker*, Winter 1955, pp. 22-40.

(iii) "The Refinement of Central Banking Technique in Canada" in *The Commerce Journal 1955*, published by The Commerce Club, University of Toronto, pp. 31-37.

Treasury bills are issued to the market through a weekly tender conducted by the Bank of Canada on behalf of the Ministry of Finance. The amounts and maturities of the bills to be offered are announced a week in advance. Tenders are invited from the Bank of Canada, the banks, and other "primary distributors", a group which includes some 300 dealers. A tender must be for an amount of $25 thousand, or multiple thereof, and the price offered is stated per $100. Most of the dealers and banks tender for various amounts at different prices. The Bank of Canada submits a bid which also may be for various amounts at different prices and it always now includes a reserve bid which guarantees that the whole issue will be marketed and that no group can force a large drop in the price of bills. The sealed tenders which must be submitted by noon on Thursday are opened at the Bank of Canada in the presence of an official of the Department of Finance, and allocations made on the basis of the highest acceptable bids. The Bank advises the tenderers of the extent to which they have been successful and publishes the high and low bids as well as the average yield on the issue. Payment in full must be made to the Bank of Canada by 3 p.m. Friday and delivery of the securities on that day may be arranged to take place at any agency of the Bank.

From January 1953 to November 1955 treasury bills were issued for terms of 91 and 273 days but since that date only the three-month bills have been issued. The longer dated bills seemed desirable when the launching of a more active market in bills was in progress but seemed less desirable after the market developed more fully especially as a considerable fraction of the outstanding government debt came to be of very short term.

A very important group in the market for treasury bills and short-term federal bonds (maturing within three years) is the special group of dealers who do "jobbing" in these securities. These dealers carry an inventory of money market securities on their own accounts, and sell to their customers from their inventories. One of the crucial problems faced by the Bank of Canada in seeking to broaden the distribution of and activate the trading in money market securities was to arrange facilities for financing the jobbers' inventories and to encourage a group of dealers to undertake the jobbing function. The facilities which were arranged and introduced by stages include the day loan facilities provided by the chartered banks, and lines of credit for jobbers provided by the Bank of Canada.

As matters stand at present (mid-1958) the arrangements operate as follows. A group of dealers, thirteen in number, having demonstrated their willingness and competence to act as jobbers in bills as well as short-term federal securities have been granted lines of credit at the Bank of Canada. Credit at the Bank of Canada is arranged in the form

of sale and repurchase agreements.[19] That is, dealers sell securities to the Bank of Canada and enter into an agreement with the Bank to repurchase the securities at any time within thirty days at a price fixed above the selling price, so that the cost of the accommodation is at least equivalent to the Bank's discount rate. This opportunity to borrow at the Bank of Canada is granted to the jobbers as a privilege and not as a matter of right; the dealers are expected to test every source of funds in the market including not only the banks but other financial institutions (domestic and foreign), corporations, and provincial treasurers, before applying to the Bank of Canada for accommodation. Indeed the cost of accommodation at the Bank encourages the dealers to seek accommodation elsewhere. Each jobber's line of credit with the Bank of Canada is limited and must be renewed each month. A dealer may be able to secure a temporary increase in his limit; he may also apply for a permanent increase in his limit if the growth of his business would seem to warrant it. The Bank of Canada thus operates as the traditional lender of last resort in this respect.[20] The day loans extended by banks and already described are a primary source of credit to finance jobbers' inventories of money market securities. Day loans are made in minimum amounts of $100,000 and as already indicated if loans are to be called or repaid on a given day this must be indicated by noon, although new loans may be made at any time up to the close of business. The banks may but do not usually fix formal limits for loans to individual jobbers, but the jobbers have individually agreed with the Bank of Canada that the total of their day loans and accommodation at the Bank of Canada shall not exceed their borrowing limits at the Bank. None of these agreements with the Bank of Canada that we have mentioned is in written form. However, the Bank asks the jobbers to report each week the details of their inventories of money market securities, their inventory loans of all kinds, and their total turnover in the past week.

In addition to day loans and lines of credit at the Bank of Canada, the dealers may obtain credit from other institutions or corporations. They may, indeed, even use the sale and repurchase technique, or as it is often referred to in this context, the "buy-back" technique. To the extent that a dealer can arrange credit with parties other than the banks or the Bank of Canada he is able, other conditions being favourable, to carry a larger inventory of money market securities, because the limits on his credit imposed by the Bank of Canada relate only to day loans, and accommodation at the Bank.

Gradually the dealers have been able to build up the market for short-term government securities. Initially they found their main customers

19 Or from the point of view of the Bank, "a purchase and resale agreement".

20 In 1956, the Bank of Canada held securities purchased under resale agreements on 62 business days, the maximum amount outstanding on any one day being $37 million. (Bank of Canada, *Annual Report, 1956*, p. 45.) In 1957, the Bank of Canada held securities purchased under resale agreements on 103 business days, the maximum amount outstanding on any one day being $59 million. (Bank of Canada, *Annual Report, 1957*, p. 29.)

among corporations with temporarily idle funds and among provincial and municipal governments with balances of unspent tax receipts. Until December 1955, fixed deposits with the banks were by comparison, a relatively unattractive outlet for such funds, but became more attractive after that date when the rate on amounts of $100,000 and over placed for 90 days or more was fixed at ¼ percent below the most recent average treasury bill tender rate.[21] In marketing treasury bills the dealers have had increasingly to compete with the short-term paper issued by finance companies however. The Bank of Canada has provided further assistance by giving delivery of bills at any of its agencies, and by allowing dealers to deposit money market securities at one agency and obtain delivery of similar securities at any other agency on the same day without charge. In addition, for a fee the Bank will, if comparable arrangements cannot be made in the market, permit dealers to borrow particular securities, for the purpose of meeting an order, against the deposit of other securities. The banks themselves because of the growth in their assets and partly because of the agreement with the Bank of Canada respecting liquid assets hold a growing volume of treasury bills and they are increasingly becoming customers of the dealers, selling bills to dealers when they are short of cash and buying them when they require them or fail to receive the amounts sought at the tender. Banks may also enter pre-tender contracts with certain dealers to hedge their own tenders. By such a contract the dealer undertakes to supply a stated amount of bills at the average tender yield minus .02 in yield, subject to a bank not having to pay more than the highest bid tendered. The changes in the volume of bills outstanding and their distribution among the Bank of Canada, chartered banks, and others are shown in Table 8.10.

The banks are important participants in the money market and beneficiaries of its development. They buy and sell treasury bills and short-dated bonds in the market, they tender for bills and they supply credit to the jobbers. The day loans made by the banks provide them with a highly liquid earning asset. Day loans have now become a widely-used medium for adjusting the cash positions of banks. If a bank is "in funds" to an extent greater than is deemed necessary it may employ the funds at interest by extending day loans. Conversely, if a bank has need to replenish its cash, it may call day loans.[22] The very development of the money market has reduced the average spread between the buying and selling

21 For deposits in amounts under $100,000, the rate is set at one percentage point below the rate on savings deposits. If the treasury bill rate falls to a point ¾ of one percent or more below the savings deposit rate, the rate on deposits under $100,000 also applies to other non-personal notice deposits.

22 Suppose a particular bank, Bank A, needs to replenish its cash and calls day loans. If it calls the loans before noon, the dealer may arrange for a day loan with another bank, Bank B. and discharge his obligation to the Bank A before close of business on that day with a cheque drawn on Bank B. At the clearing of inter-bank balances the following morning, in the absence of offsetting transactions, Bank A will have a net claim against other banks, which will be settled by a transfer of deposits at the Bank of Canada to Bank A thus replenishing its reserves. If all banks simultaneously call day loans, total bank cash can only be increased by an increase in Bank of Canada assets (or a decrease in its liabilities other than for bank cash) and one method of accomplishing this would be for dealers to sell the securities held as collateral against their day loans to the Bank of Canada under a repurchase agreement.

Table 8.10

DISTRIBUTION OF HOLDINGS OF TREASURY BILLS

(based on par values)

Wednesdays	Bank of Canada %	Chartered Banks %	Other %	Total %	Total $ Millions
1954					
Jan. 27........	53.1	42.1	4.8	100.0	650
Feb. 24........	48.3	44.6	7.1	100.0	650
Mar. 31........	46.5	45.1	8.5	100.0	650
April 28........	45.8	45.7	8.5	100.0	650
May 26........	45.5	47.1	7.4	100.0	650
June 30........	3 .5	46.8	13.7	100.0	650
July 28........	24.0	51.8	24.0	100.0	670
Aug. 25........	20.0	58.0	22.0	100.0	690
Sept. 29........	13.1	60.1	26.6	100.0	715
Oct. 27........	16.3	50.3	33.3	100.0	735
Nov. 24........	26.5	51.7	21.9	100.0	755
Dec. 29........	22.7	40.5	36.8	100.0	780
1955					
Jan. 26........	17.1	54.4	28.4	100.0	800
Feb. 23........	15.0	50.1	34.9	100.0	840
Mar. 30........	18.5	48.9	32.6	100.0	890
April 27........	25.4	39.6	35.1	100.0	930
May 25........	20.2	43.7	36.1	100.0	970
June 29........	27.0	36.8	36.3	100.0	1,020
July 27........	26.9	38.8	34.4	100.0	1,050
Aug. 31........	22.5	39.0	38.5	100.0	1,075
Sept. 28........	22.9	33.2	43.8	100.0	1,095
Oct. 26........	26.5	27.8	45.9	100.0	1,145
Nov. 30........	25.9	28.0	46.1	100.0	1,170
Dec. 28........	21.9	34.5	43.6	100.0	1,205
1956					
Jan. 25........	18.4	37.6	44.0	100.0	1,275
Feb. 29........	23.8	39.4	36.7	100.0	1,430
Mar. 28........	28.2	36.4	35.4	100.0	1,575
April 25........	20.5	44.3	35.2	100.0	1,640
May 30........	23.3	44.9	31.8	100.0	1,690
June 27........	27.5	47.0	25.4	100.0	1,690
July 25........	27.6	43.4	29.1	100.0	1,695
Aug. 29........	29.0	49.0	22.1	100.0	1,705
Sept. 26........	30.2	46.7	19.0	100.0	1,725
Oct. 31........	32.6	46.2	21.3	100.0	1,720
Nov. 28........	32.3	45.0	22.6	100.0	1,645
Dec. 26........	32.7	47.4	19.8	100.0	1,585
1957					
Jan. 30........	26.7	51.6	21.7	100.0	1,565
Feb. 27........	27.2	50.5	22.2	100.0	1,605
Mar. 27........	29.7	49.5	20.8	100.0	1,625
April 24........	31.0	47.3	21.7	100.0	1,625
May 29........	29.2	50.1	20.7	100.0	1,625
June 26........	31.8	48.9	19.3	100.0	1,625
July 31........	31.1	49.0	19.8	100.0	1,625
Aug. 28........	33.6	50.1	16.3	100.0	1,635
Sept. 25........	27.9	56.0	16.2	100.0	1,655
Oct. 30........	32.5	48.0	19.5	100.0	1,655
Nov. 27........	28.0	49.1	22.9	100.0	1,645
Dec. 25........	29.0	49.1	21.9	100.0	1,625

SOURCE: *Statistical Summary*, Bank of Canada.

prices of treasury bills and short-term federal bonds, thereby rendering these securities, which the banks hold in ever larger amounts, more liquid assets.

The position of the Bank of Canada in the money market is, as the above description will have indicated, of paramount importance. A well-functioning money market, on the other hand, is of great value to the Bank of Canada. The development of the money market which has taken place especially since 1954 is to be attributed to the initiative of the Bank of Canada and the co-operation of the banks and dealers.[23] The Bank now acts as lender of last resort in this market and supplies other technical facilities to the traders in it. The more efficient use of chartered bank and other funds permitted by the facilities of the market used in conjunction with the new formula for calculating required banking reserves is welcomed by the Bank of Canada for at least two reasons. The Bank has a general interest in seeing that the machinery for mobilizing and applying funds does not unnecessarily allow financial resources to be less than fully utilized. But of even more direct importance, the development of the money market facilitates the exercise of central bank control over chartered bank cash which is the primary function of the Bank of Canada. In the period before 1954, the Bank of Canada was more or less obliged to provide a market for treasury bills when any of the banks, which were the chief holders of bills (apart from government accounts and the Bank of Canada itself), wished to dispose of them. Indeed the sale of treasury bills, (or the running off of bills) was the principal device used by the banks to adjust their cash position to an unexpected or undesirable shortfall. In these circumstances the Bank's initiative in the bill market was severely restricted; it could scarcely refuse to buy bills at some price. Moreover, since the market was so narrow and since there was virtually no trading in outstanding bills, the bill market had severe limitations as a vehicle for the Bank's open market operations. Now, while the Bank must still take bills and short-term securities from the market as a lender of last resort, it need not take them directly from the chartered banks ordinarily; rather it takes them from the jobbers, whose very business is to buy and sell bills. In addition the rather more rigid adherence by the banks to the required cash ratio, made possible in part by the emergence of the market, of itself renders the banks more responsive to changes in their cash position induced by Bank of Canada action. As we have seen however the reserve formula has introduced other complications in this connection. No doubt a yet wider distribution of bills and even more active trading in outstanding money market securities would be helpful, but there seems little doubt that by facilitating the growth of this market, the Bank has not only activated funds, but provided a somewhat more satisfactory vehicle for its own operations.

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23 The reader is referred again for the full story of the Bank's part in initiating steps leading to a more fully developed money market to the paper by J. S. G. Wilson, "The Canadian Money Market Experiment", *op. cit.*

While the market for short-term bills and securities of the federal government has developed considerably in the last two or three years, the markets for other kinds of short-term securities with one exception have not developed to nearly the same extent. We have seen in Chapter 5 that the market for the short-term notes of instalment finance companies has broadened considerably, partly because of the widening of the market for treasury bills. Finance company notes are now being purchased by a steadily widening class of buyers but there does not appear to be any trading of outstanding issues in this market. The finance companies themselves have been known to enter the market and repurchase their own obligations in order to prevent sharp declines in price. Similarly, the short-term obligations of junior governments, though they can be placed particularly with financial institutions, do not enjoy any secondary market. There is a modicum of inter-corporate short-term lending, and dealers sometimes assist in bringing borrowers and lenders together in this market, but the volume of such transactions is as yet so small as hardly to warrant speaking of a market for the short-term notes of companies other than finance companies. Commercial bills exist in Canada but they are held by the commercial banks rather than traded. It has been rumoured that the Bank of Canada has been exploring the ways and means by which it might contribute to the development of a market in commercial bills in the form of bankers' acceptances. The President of the Royal Bank of Canada in his annual address to the shareholders in January 1958 proposed a study of steps that might be taken to develop such a market.

B. The Banks and the Regulators of the Flows of Funds

1. *Banking legislation*

We have referred at many points in this volume to the legislation governing the Bank of Canada and the chartered banks, especially the Bank of Canada Act[24] and the Bank Act.[25] Accordingly we offer here only the briefest recapitulation of certain features of the legislation which will serve as a reminder that the flows of funds to and from the banking system are indeed regulated in part by the legislation.

The Bank of Canada under the banking legislation is accorded the sole right to issue notes in Canada. It acts as a bank of deposit for the chartered banks, these deposits constituting the great bulk of the chartered banks' cash reserves. It also acts as a depository for the Government of Canada, and the Quebec saving banks but on none of these deposits or on chartered bank deposits is it allowed to pay interest. Foreign central banks and certain international monetary institutions may also make deposits with the Bank of Canada. The Bank also has limited authority to alter the statutory cash reserve ratio of the chartered banks. In

24 *Revised Statutes of Canada*, 1952, C. 13, as amended by R.S.C., 1952, C. 315, 1953-4, C. 33.
25 *Statutes of Canada*, 1953-1954, C. 48.

particular, it has authority to fix this ratio at not more than 12 percent or less than 8 percent but must give at least one month's notice of any changes in the requirement and is not permitted to *increase* the ratio in any one month by more than one percentage point.

The Bank is empowered to hold federal government obligations; it may hold obligations of certain foreign governments, foreign exchange and gold. The Bank from time to time makes temporary loans or advances to the Government of Canada, the chartered banks, dealers in the money market and Quebec savings banks. While the Bank may buy or sell securities issued or guaranteed by a province of Canada, it rarely does and has not done so since 1947. Though it may buy and sell certain bills of exchange and promissory notes endorsed by a chartered bank, such transactions have as yet been of no importance. The Bank has no authority to deal in municipal securities or in corporate bonds or stocks.

The Bank is required to act as fiscal agent of the Government of Canada and as stipulated by the Minister of Finance to act "generally in respect of the management of the public debt of Canada". It is authorized to act, by agreement, as banker or fiscal agent of any province of Canada but has not yet done so.

The chartered banks may receive deposits, and may make charges for servicing deposits if there is an express agreement with each customer to this effect. There is no statutory limit on the rate of interest a bank may allow on its deposits. The banks may invest in corporate bonds and stocks, obligations direct and guaranteed of government authorities in Canada and may invest in the obligations of certain foreign governments and concerns, and may hold foreign exchange and gold. The provisions respecting bank loans including mortgage loans and the ceilings over charges thereon have been referred to earlier in this chapter.[26] The banks are required to maintain a minimum proportion of their Canadian deposit liabilities as cash reserves in the form of Bank of Canada notes and deposits with the Bank of Canada.

Several classes of assets held by the chartered banks are either guaranteed or insured by the federal government. This is true of certain bonds such as some of those issued by the Canadian National Railways. It is also true of mortgage loans made under the National Housing Act, including so-called Home Improvement Loans, and of loans made under the Farm Improvement Loans Act.

2. *Interest rates and the chartered banks*

The responsiveness of the chartered banks to the changing prices or yields of assets in the capital market, both in the setting of the rates

[26] The banks may in discounting bills of exchange, promissory notes and the like, make certain service charges in addition to the discount. There are statutory limits to these charges. No charge may be made on cheques issued by or in favour of the Receiver General of Canada or the Government of Canada.

they pay on deposits and charge on loans and in determining the distribution of their assets is a matter of great importance for the working of the capital market. We shall consider first the rates they pay on deposits, then the rates they charge on loans and finally, the role of relative yields in determining their portfolio.

(a) Rates of interest paid on personal savings deposits

In Table 8.11 we show the rates paid on personal savings deposits since January 1, 1924. As we have noted there is no legislative control over this rate. The rate is agreed upon by the banks. It could by no means

Table 8.11

INTEREST RATES ON PERSONAL SAVINGS DEPOSITS AT CHARTERED BANKS IN CANADA[a]

The rate of 3 percent per annum was in effect for many years prior to 1924.

January	1, 1924 — 3%	per	annum	on	minimum	monthly	balance
May	1, 1933 — 2½%	"	"	"	"	"	"
November	1, 1934 — 2%	"	"	"	"	"	"
June	1, 1936 — 1½%	"	"	"	"	"	"
March	1, 1939 — 1½%	"	"	"	"	quarterly	"
December	1, 1953 — 2%	"	"	"	"	"	"
August	1, 1956 — 2¼%	"	"	"	"	"	"
September	15, 1956 — 2½%	"	"	"	"	"	"
February	1, 1957 — 2¾%	"	"	"	"	"	"

a Interest is added to accounts half yearly.

be described as a highly volatile rate. It was only in the last wave of the post-war inflation that it had any clear tendency to move in reasonably close accord with other rates in the market (though it did fall somewhat belatedly in the depression of the early thirties). The lack of flexibility in this rate is a reflection of the lack of sensitivity of consumer-investors to changes in the differences among yields of assets; in times of rising interest rates it may also be a reflection of the ceiling on bank loan charges.

We have already remarked that the banks' rates on non-personal notice deposits were, until December 1955, moved only very infrequently, but that after that date, on certain types of such deposits the rate was fixed at ¼ percent below the average tender rate on treasury bills.

(b) Rates charged on loans

The only public figure available on rates charged on loans by commercial banks is the prime commercial loan rate. The changes in this are shown in Table 8.12. As we remarked in Chapter 6 there is a great dearth of information on bank loans in Canada, and this applies to the rates charged as well as to other features of the loans. The information in Table 8.12 indicates that there has not traditionally been great volatility in this rate. It is again only in the third wave of the post-war inflation that

the rate was moved at all in the post-war period. Of course we do not know what proportion of the value of loans was made at the prime rate at various periods. Certainly this proportion must have increased greatly when the prime rate crowded the statutory ceiling of 6 percent. The banks also fix this rate in consultation with each other, and the rate is the same for all banks, though there may be differences among banks in the practices of classifying credits. A cost committee of the Bankers' Association makes continuing studies of the costs of loans of various kinds however. None of this information is public; we cannot resist offering the conjecture however, that it must be a most difficult problem to decide what is the cost of a particular group of loans.

Table 8.12

PRIME RATE CHARGED BY CHARTERED BANKS ON COMMERCIAL LOANS IN CANADA

1945-1956		— 4½% per annum
April	23, 1956	— 5% per annum
August	20, 1956	— 5¼% per annum
October	22, 1956	— 5½% per annum
August	26, 1957	— 5¾% per annum
December	2, 1957	— 5½% per annum
February	17, 1958	— 5¼% per annum

The statutory ceiling on bank loan charges is a rigidity in the capital market mechanism which prevents prices or charges from properly fulfilling their function of allocating funds. The deterrent to borrowers of higher interest rates is restricted and, since deposit rates are related to loan charges, the incentives to invest funds rather than to spend them are weakened. While the ceiling was undoubtedly imposed with the idea of preventing usurious practices it may be that it works hardship on some of those whom it was designed to protect by having the effect of denying them credit. Banks, when experiencing an ample flow of applications for funds must necessarily ration an increased proportion of their credits to the very sure risks if forced to work under a ceiling on charges. The consequence may be that some borrowers, quite willing and able to pay interest costs above the ceiling, but whose alternative opportunities for borrowing are severely limited are denied funds altogether. In discussing the financing of small and risky business in Chapter 6 we concluded that "if small business in Canada is being regularly deprived of capital funds simply because of some anomaly of the capital market it is not glaringly obvious". However, the anomaly of the capital market represented by the ceiling on bank loan charges may occasionally (but not "regularly") in times of very tight money operate to the detriment of some small businesses. There is no conclusive proof that it does; we have not the evidence concerning banks' loans to illumine the matter.

c) Portfolio adjustments in response to changing yield differentials

Differences in the yields of loans reflect differences in the costs of administering and differences in the degree of risk attached to loans. These differential yields are inevitably changed when in a period of rising interest rates the prime commercial loan rate is raised toward the ceiling on bank loan charges. As we have just argued, if the banks are sensitive to changing yield differentials the effect would be to induce banks to ration credit to riskier borrowers and borrowers for whom the costs of administration are higher, progressively more severely. We do not know for a fact that the banks do react in this way to any significant degree, but it can be asserted that if they do react in this way our objectives concerning the allocation of funds by the price system are being frustrated.

The gross yields of bank loans are almost always above the yields of bonds. But since as the yields of bank loans move sluggishly, the differential between bond yields and loan yields tends to widen during downswings in economic activity and narrow during upswings. However, and perhaps to some degree because bank loan charges move sluggishly, the demand for bank loans falls during downswings and banks invest a larger proportion of their assets in bonds, especially government bonds in these periods. During upswings in economic activity, when the demand for loans is increasing and stronger, banks increase the proportion of their portfolio in loans. One concludes that to the extent permitted by legislation, concepts of good banking practice, and the demands for credit, banks seek continuously to invest in those assets which bring the highest return.

3. *Selected practices of banks affecting the flows of funds*

We have implied that good banking practice places some limitations on the weight that can be given to yields in the selection of assets. There is among the chartered banks, undoubtedly, and quite rightly, some notion, albeit flexible and not precisely conceived, of a minimum proportion of federal government securities which banks should carry in their portfolio. In addition there is an overriding yet, again, flexible notion that short-term assets should predominate over long-term assets in the portfolio. In Canadian banks, with their high proportion of savings deposits (against which, however, cheques may be written) the preference for shorter-term assets is less marked than among banks of some other countries. Commercial bankers in Canada are also guided, it would appear, by some feelings concerning a desirable degree of diversity among their assets. They certainly impose limits on loans to particular borrowers and their portfolio as published shows a diversity of assets and shows loans to a diversity of industrial and other borrowers. While the banks do not invest to a significant degree in speculative shares, they do offer extensive temporary financing to new ventures of new and established concerns. They make term loans for capital purposes (at present in amounts less than $1

million). It cannot be contended that the banks exerted any great pressure to be allowed to make residential mortgage loans, though, given the character of Canadian banking there would seem to be every reason why they should make such loans, both conventional and otherwise. In general the banks' portfolios show great diversity and this is unquestionably a result of deliberate policy.

Closely related to the conventions governing the distribution of the portfolio which have just been referred to is the practice of credit rationing. We use the term here to refer particularly to the methods used in selecting the applicants for loans within various categories who are to be favoured. The rate of interest that may be charged is by no means the only consideration that must be adduced when deciding whether an application for funds shall be accepted in whole or in part or not at all. This observation is of course all the more relevant when there is a statutory limit to the amount that may be charged. The estimate of the over-all "credit worthiness" of the borrower, the nature of the use to which the funds are to be put, the character and qualifications of the borrower, the collateral he can offer, the amount of business he has done or may do with the bank, the risk of losing his account or the possibility of gaining it — these and probably many other considerations are weighed by the local manager, or other credit officer of a bank in deciding upon loans.

Another practice of the banks which affects the flow of funds is that of making forward commitments to borrowers. This has obvious advantages for the borrower but it creates difficulties for the monetary authorities in seeking to curb the expansion of credit. The cost to the banks of providing this service may be reflected in the rate of interest charged — again there is no information on this aspect of bank lending — but there is certainly no separate charge as such for the service.[27] In some countries, borrowers enjoying commitments from the banks are required to maintain minimum balances on deposit with the bank giving the commitment and these requirements may be changed as credit conditions change but so far as this writer knows such a practice is very uncommon in Canada.

Before leaving the subject of bank practices affecting the flow of funds mention should be made of one long-standing convention among chartered banks in Canada. This is an inhibition against borrowing from the central bank. The practice is very common in some capital markets as for example in the United States though even in this instance the banks show some reluctance to borrow. Provision was made for chartered bank borrowing at the central bank in the original Bank of Canada Act (1934) and the facilities have been available since the Bank of Canada began operations in 1935. However until the several changes introduced in the Bank Act revision of 1954 and made in connection with the fostering of the money market at about the same time there had been

[27] The banks might feel that to impose a separate charge would make the commitment firmer and more formal than they would wish in general.

only one or two isolated instances of such chartered bank borrowing. Since the changes referred to, borrowing has become somewhat more frequent[28] and it may be that the only inhibition against borrowing now is the proper one, namely, the cost, in that the rate is a penalty rate, and loans must be made for a minimum of seven days.

The reluctance to show indebtedness to the central bank in a balance sheet is an aspect of so-called "window dressing". The practice of showing a relatively high cash ratio at month-end and at the end of a fiscal year used to be very common among chartered banks in Canada. They appear to have dropped the practice except for purposes of the fiscal year-end balance sheet, though the fact that the practice should be continued at all by some banks is somewhat incredible.[29]

4. *The central bank's influence over the commercial banks*[30]

There are two principal ways in which the Bank of Canada exerts its influence over the size or composition of commercial bank assets. It influences the cash reserve position of the banks and it offers advice and suggestions. Let us review these two aspects of central bank policy as a regulator of the flows of funds. (Other aspects will be taken up in Chapter 9.)

A. *The central bank and chartered bank reserves*

The most important method used by the Bank of Canada to affect the size of chartered bank cash reserves is that of "open market operations" — purchases and sales of securities — in the markets for Government of Canada securities.[31] The Bank does not confine itself to the shorter maturities but deals in government issues of all available maturities, according as circumstances warrant. In this the Bank's practice differs from that now followed by the Federal Reserve authorities in the United States.[32]

A central bank prefers to conduct its operations in a market in which there are many buyers and sellers, firm quotations of prices and continuous trading. In such a market the bank has very little need to intervene solely for the purpose of maintaining orderly conditions, and its transactions undertaken to produce changes in bank cash have the least disrupting effect on prices and traders in the market. Professional dealers who are prepared to hold inventory, quote firm buying and selling prices, and undertake arbitraging among issues are very necessary for the proper

28 In 1956, Bank of Canada advances to chartered and savings banks were outstanding on 105 business days. The maximum amount outstanding on any one day was $60 million. (Bank of Canada, *Annual Report, 1956,* p. 44.) In 1957 Bank of Canada advances to chartered and savings banks were outstanding on 59 business days. The maximum amount outstanding on any one day was $30 million. (Bank of Canada, *Annual Report, 1957,* p. 29).

29 There might be advantage in requiring or permitting the banks to show on their official monthly returns their average holdings of Bank of Canada notes and deposits over the month.

30 On the subject of this section the reader is referred particularly to E. P. Neufeld, *Bank of Canada Operations, 1935-1954,* Toronto, 1955, a new edition of which is shortly to appear.

31 Purchases of securities by the Bank of Canada have the effect of increasing bank reserves; sales of securities have the opposite effect.

32 Federal Reserve Policy in this matter was modified in mid-1958.

functioning of the type of market described. The United States authorities began to take the view in 1951, which was elaborated upon in a study in 1952 and confirmed in 1953 in a change in direction from the Federal Reserve Open Market Committee to its executive, that Federal Reserve participation in the longer-term government security market made the operations of the professional dealers much more difficult and hence increased the need for official intervention solely to maintain orderly conditions. In the longer end of the market price swings are larger and dealers' risks greater. It was felt that the size of the official transactions and their unpredictability as to timing, extent and amount, when coupled with the greater risk of price fluctuation, led to an unwillingness by dealers to take positions and conduct necessary arbitraging. It was deemed desirable therefore to confine official transactions as much as possible to the shorter end of the maturity scale where the risks of price fluctuation are less and dealers more willing to take positions and make markets.

It is debatable whether the Reserve authorities have properly assessed the situation — there has been public disagreement among them.[33] But be that as it may, the practices in Canada have been rather different. The market in treasury bills, as has been explained, existed only in rudimentary state prior to 1954 and while it has been developed remarkably since then, it could not now accommodate smoothly and effectively all of the open market operations of the Bank of Canada. It may well be that technical considerations make it more difficult for dealers to make markets in longer term securities than shorter term securities. To the extent that dealers do not perform the function and would not in the absence of Bank of Canada operation, the Bank of Canada must perform some of the dealers' functions and operate throughout the entire range of maturities. But while the central bank authorities may have different objectives in its purchases and sales than other security traders there must be a great variety of objectives among all buyers and sellers, and it is precisely the function of the professional dealer to assess the motives of all traders and to conduct their operations accordingly. Dealers in Canada as well as professional speculators have on occasion lost money by failing accurately to anticipate developments in the government securities markets; on other occasions they have been much more successful. It is certain that with professional dealers in the market the central bank can conduct its operations more successfully; practices must be followed therefore which while not guaranteeing a profit on every transaction nevertheless make it possible for dealers to learn to perform their functions profitably on the average. This much is clear. The present writer feels however that it would be wrong for the Bank to contemplate ever relinquishing, even partially, the right to deal in all government securities. Indeed as a matter of principle, though there are practical and technical obstacles, there is much to be said for

33 For the relevant Federal Reserve document and some dissenting views, the reader is referred to *United States Monetary Policy: Recent Thinking and Experience,* Hearings before the Subcommittee on Economic Stabilization of the Joint Committee on the Economic Report, Congress of the U.S., Dec. 6 and 7, 1954.

exploring ways of increasing the range of assets in which the Bank may conduct open market operations. Markets can never be perfect.

In addition to its open market operations in government securities, the Bank of Canada has other means of affecting the chartered banks' cash reserves. Its dealings in foreign exchange for example may affect bank reserves. The Bank is limited however in the extent to which it may regularly use this technique of influencing bank reserves as its operations must be consistent with the objectives of the Exchange Fund Account whose agent it is. Moreover the use of the assets of the Exchange Fund Account (as distinct from its own assets) must have the approval of the Minister of Finance.

The Bank of Canada stands ready to act as "lender of last resort" to the dealers in the money market (through purchase and resale agreements) and to the chartered banks. The first advance to a chartered bank in any month (up to a specified amount for each bank) bears interest at the Bank Rate, the minimum rate at which the central bank makes advances. A second advance to the same bank in any calendar month, or a renewal of an advance (each advance is made for a period of seven days) or an advance in excess of the specified amount bears interest at a rate higher than the Bank Rate.[34] Banks may replenish their reserves by obtaining advances directly from the central bank, though this is more costly than the calling of day loans or the selling of treasury bills both because the interest rate is higher and because the minimum period for a central bank advance to the chartered banks is seven days.

The Bank of Canada may also influence reserves in advising the government as to the allocation of its deposits as between the central bank and the commercial banks. At times this may be a significant short-term method of influencing reserves. Parenthetically we may note that funds tranferred from the chartered banks may not appear as deposits at the central bank as they may be used to purchase securities (especially, in practice, securities soon to mature) from the Bank of Canada for the government's Securities Investment Account.

We have already referred, in discussing the legislation, to the authority possessed by the Bank of Canada to vary the statutory minimum cash reserve ratio of the banks. This authority, granted in 1954 has never been exercised. The ratio has remained at 8 percent since it was originally fixed at that level in mid-1954.

The minimum rate at which the Bank of Canada makes advances, the Bank Rate, has been mentioned at several points in this chapter, but the method of fixing this rate has not been described. Prior to November 1, 1956 this rate was fixed from time to time by the Bank of Canada and the announcement of its new level served as a signal to the financial

34 Bank of Canada, *Annual Report, 1956*, pp. 44-5.

world and to the community at large of the general character of monetary policy to be expected. Indeed, before the middle of 1954 this was virtually the only function performed by the rate as practically no advances were made by the Bank. Following the changes in practices introduced in the middle of 1954, advances were made by the Bank both to dealers and to the banks. In the subsequent two years several increases in the rate had to be made as conditions in the credit markets tightened and the Bank was concerned and embarrassed by the misunderstanding evoked in some quarters by these changes to the effect that the Bank was "setting or fixing or controlling interest rates of all kinds by its action in changing and publishing its own minimum rate".[35] There might also have been concern over the fact that the spread between bill rates and the Bank Rate was a fluctuating one which may have added an unnecessary degree of uncertainty to the task of the bill jobbers. On the first of November, 1956, the method of fixing the Bank Rate was changed and it is now understood that it will be fixed each week at ¼ of one percent above the average tender rate on treasury bills. Some persons feel that the loss of the signalling effect of the announcement of the Bank Rate is of significance.[36] It is argued that to an increasing degree institutions were adopting the practice of revising deposit rates and lending rates when the Bank Rate was changed and that accordingly a desirable degree of flexibility in these rates was being achieved. Some dealers and other participants in the market for government securities feel they are entitled to and require at least this much indication of the likely course of monetary policy. This may be so, but there are other ways in which the Bank may make known its intentions to such degree as it thinks desirable. Others argue that the effect of formal announcements of Bank Rate changes may be destabilizing and render the execution of monetary policy more difficult. This would be the case if for example the rise in the Bank Rate served to confirm beliefs that prices and incomes would continue to rise, or that since money is apparently likely to become more expensive it would be desirable to borrow now, before the rise in borrowing costs proceeds further.[37] The writer's own view is that the adoption of the floating bank rate policy has not been of fundamental significance and is almost certainly a technical improvement.

B. *The influence of chartered bank operations by the central bank through offers of advice and suggestions*

There have been many occasions in the post-war years on which the Bank of Canada has exercised its powers of persuasion, suggestion and leadership. Many of these occasions have been referred to earlier in this volume. We shall review them and one or two of the more recent ones at this point.

35 Bank of Canada, *Annual Report, 1956*, p. 45.

36 Of course Bank Rate movements still have some signalling effect, especially if changes persist for two weeks or more.

37 This line of argument is developed by Warren L. Smith in his article "The Discount Rate as a Credit-Control Weapon," *Journal of Political Economy*, 1958, V. LXVI, pp. 171-177.

(i) The efforts of the Bank of Canada to initiate new machinery involving banks and dealers to the end of improving the money market have been discussed in this chapter and only this brief allusion to them is made here.

(ii) The term loan agreements were introduced on three different occasions and in modified form are still in effect. These agreements had the effect of forcing large borrowers, who were borrowing essentially to finance capital construction, to go to the capital market to raise their funds at the costs being imposed in the rising markets for bonds and stocks. While in general, one would oppose any arbitrary limiting of the banks' field of investment, or a borrower's opportunities for securing funds, in the light of the ceiling on bank loan charges one can support the agreements as temporary limitations imposed only in a period of high interest rates. The agreements forced the borrowers seeking longer term funds into the free market where their demands could influence and be influenced by the rates pertaining there. The agreements have been, however, a second best solution to the problem posed by the legislative blockage of the working of the price system in the capital market which the ceiling on bank loan charges constitutes in a period of high interest rates. The best solution would be to remove the ceiling. It may be observed that the agreements placed no limitation on the banks' purchases of corporation bonds and stocks in the open market.

(iii) The ceiling on bank loans imposed in the second post-war period of inflation was a very drastic interference with the working of the price system in the capital market and is a policy not to be recommended generally. The alternatives are preferable; namely to restrict bank cash further and to remove the ceiling on bank loan charges.

(iv) The restrictions on bank loans to finance companies which were imposed on more than one occasion affected the banks' distribution of assets and of funds. This is an obvious fact, but relevant here. The restrictions represent a direct interference with the allocation of funds as between consumers and others. The Bank of Canada, in its reports is always very careful to state that these restrictions were imposed by the banks. It is reported however (in the 1956 *Annual Report*) that the Bank held discussions with representatives of the major instalment finance companies with a view to reaching a voluntary agreement to prevent further significant increases in the total volume of consumer credit. It is an important question whether it is a proper function of the Bank of Canada (as presently constituted or otherwise) to interfere even in this way with the allocation of funds and we shall allude to this larger issue again in the final chapter.

(v) In his *Annual Report* for 1957, the Governor of the Bank of Canada made extended reference to the problems of financing small

business and to the banks' role in providing such finance. In order to present the Bank's point of view completely and fairly we offer the following extended quotation:

> "The matter of providing adequate finance for small business — with which I would include the requirements of farmers and professional groups as well as the needs of ordinary individuals for personal loans for non-speculative purposes — seems to me to be one of great importance. During 1957, as in 1956, we have in discussions with the chartered banks expressed concern for the position of these small borrowers. We have been assured by the banks that there was no discrimination against such borrowers. . . . Even if small borrowers are assured of non-discriminatory treatment by the banks they may be handicapped relative to large borrowers. Small borrowers cannot supplement their use of bank credit by selling new issues of their securities in the market. Small business depends more on the banks, and must turn to the banks for increased accommodation when business is expanding. It would, I think, be desirable that whenever the banks find it necessary to allocate their resources in the face of excessive total demand they should limit the rationing process to the field of large loans and should make it clear that this was the case. The first call on the resources of the national branch banking system must, I think, be to fill the credit-worthy needs for banking accommodation of small businesses, institutions, farmers and individuals — including a reasonable level of loans for housing — in all the various localities across Canada. This approach is feasible because the funds required to meet such needs are small in relation to the total resources of the chartered banks. The banks will always have very substantial additional resources to make available in flexible amounts for loans to large enterprises — enterprises which can and do also obtain funds from non-bank sources and can vary their proportion of bank debt to non-bank debt as the circumstances may require. The experience of the past two or three years suggests that much misunderstanding and difficulty would be avoided in future if it could be made clear that changing economic and financial conditions did not affect the banks' willingness and ability to accommodate credit-worthy small borrowers."[38]

This statement says some useful things and indeed some quite proper things. It implies that small businesses in Canada were squeezed disproportionately hard in the 1956-57 period of tight money. Now it is certainly an important function of the central bank to draw attention publicly to weaknesses it believes to inhere in the working of the capital market. But does not this statement say both too little and too much? Would not this *Annual Report* have been a suitable place to refer to the

[38] Bank of Canada, *Annual Report, 1957*, pp. 20-21.

possibility that any disproportionate squeezing of small borrowers might in considerable measure be attributable to the narrowing of the differentials on bank loan charges resulting from the rise of the prime rate to within one-quarter of 1 percent of the ceiling on bank charges and to suggest that a possible remedy would be a removal or raising of the ceiling on bank loan charges? Surely the latter part of the statement goes too far in suggesting that "credit-worthy" small borrowers should never be squeezed in periods of actual or impending inflation; in such periods the whole purpose of the Bank's policies must be to bring about a *general* squeezing of borrowers.

(vi) In 1957 the Bank of Canada officially expressed some concern over the virtual withdrawal of the banks from the field of residential mortgage lending in the first part of the year and suggested to the banks that if they resumed this type of lending the Bank of Canada anticipated that their resources would be adequate for the purpose. Our language is almost as guarded as the Governor's but we should use his. In his 1957 *Annual Report* the Governor, after referring to the decline in the banks' approvals of NHA loans in the early months of 1957 said:

> "In discussing this situation with the chartered banks I expressed the view that they should maintain continuity in mortgage lending as an important field of investment for savings entrusted to them. At a meeting in March the banks agreed to resume operations in this field on much the same scale as in 1956 . . . the Bank of Canada indicated[39] that the total resources of the banks as a group could be expected to increase during 1957 by an amount at least great enough to take care of their disbursements on mortgage loans in that year, so that it would not be necessary for the banks to dispose of other assets in order to maintain a flow of funds for insured housing loans."[40]

These discussions took place when the monetary policy of the Bank was restrictive, when prices were still rising. Now it may be that the Bank of Canada with commendable foresight anticipated the levelling of economic activity that in fact took place after mid-year. It may also be that the Bank felt it was not compromising its general monetary policy in that the increase in savings deposits could confidently be expected to be much larger than the mortgage loan disbursements. But both of these considerations are beside the point. The point is that the Bank undertook directly to influence the allocation of funds by the banks. It argued that it was especially concerned to maintain the continuity of the banks' participation in this mortgage market. It may be contended that banks are naturally reluctant to invest in illiquid assets when it appears possible that current deposits may decline to the extent of forcing

39 In the official Bank press release issued March 14, 1957 the wording at this point was slightly different: "The Bank of Canada *assured* the chartered banks that as a group their total resources could be expected to increase . . ." (*italics* added).

40 Bank of Canada, *Annual Report, 1957*, p. 28.

a reduction in total assets, and that for the Bank of Canada to relieve the banks of the need to consider these risks was a purely technical central banking operation. But if the Bank of Canada is to assume responsibility for ensuring that the banks' mortgage lending is not episodic should it not have more authority over banks and over other lenders in this market? The Bank of Canada has placed itself in the position of arguing (by implication if not directly) that funds *should* be allocated to housing and this aspect of the directing of capital funds is one over which it has no specific statutory authority. There has been no suggestion that in making its moves the Bank was acting specifically as the agent of an appropriate government authority. Perhaps the Bank should have more authority over the allocation of funds to housing. But a government policy which would be more consistent with allowing decisions to be taken in the market place would be to free the rate on NHA loans, allow it to be determined in the market place, further extend the machinery for making mortgages a more readily transferable asset in the market, and permit banks to make conventional residential housing loans as well as insured loans.

(vii) In his 1956 Report, the Governor of the Bank of Canada commented on the fact that Canadian chartered banks serving both as commercial banks and savings banks, and holding long-term assets as well as shorter term commercial loans have been able to use the resources of the savings departments "to augment the other resources of the banks' commercial banking departments when the demand for commercial loans has been particularly great".[41] As a consequence, "housing loans and other investments have been the residual form of investment for the savings departments of the banks".[41] These facts, the Governor contended have "created problems relating both to fluctuations in short-term credit and to fluctuations in long-term investment".[41] He went on to suggest that:

> "It may be that specialized savings institutions, which invest their funds in housing loans and other long-term investments and are able thereby to pay higher rates of interest on savings deposits than the chartered banks will grow in importance and attract a growing part of the future personal savings of Canadians. To maintain their relative position, the chartered banks may find it desirable and necessary to operate in respect of the resources of their savings departments in much the same way as a savings bank and use such resources to provide funds for the kinds of investment naturally associated with long-term savings.
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> "To the extent that personal savings were segregated from the commercial lending field, they could be regarded as likewise removed from the category of 'money supply'. The banks' short-term credit operations would become more responsive to changes in monetary conditions. It would of course be the duty of the central bank — as it is

[41] Bank of Canada, *Annual Report, 1956*, p. 29.

today — to see that sufficient money was made available to permit an adequate volume of short-term credit to be provided through the banking system. The volume of short-term loans might not be any different from what it has been, on the average and allowing for normal growth, but a tendency towards excessive expansion in periods of inflationary pressures would be more readily restrained. Fluctuations in mortgage lending would of course be much less pronounced. The workings of monetary policy would become more predictable and more effective. The possibility of a gradual approach towards arrangements of the sort outlined would seem to be worthy of study and discussion. Progress in such an approach would be directed towards expanding mortgage loans and other appropriate investments based on future increases in savings deposits, not reducing the volume of commercial or general loans".[42]

This suggestion is reminiscent of an agreement between the banks and the government in 1946 whereby the banks undertook to limit their investment in bonds issued or guaranteed by the Government of Canada to 90 percent of their Canadian personal savings deposits. "The agreement places the chartered banks, in respect of their savings business, in approximately the same position as if they were separate savings institutions carrying 10 percent of their deposits in the form of cash and other non-earning assets." wrote the Governor in his *Annual Report* for 1946 (p. 14). This agreement was made at a time when the concern of the Bank was more to accelerate the rate of bank lending than to retard it.

The 1956 suggestion is clearly related to the Bank's concern over the flow of funds into the mortgage market. The splitting off of the savings departments of the banks would restrict the classes of investments open to funds in the savings deposits of Canadian banks — a result that is itself undesirable — but whether it would stabilize the flow of funds from banks into NHA mortgages is more problematical. Certainly this flow of funds would be interrupted if the NHA mortgage loan rate were pegged at an artificially low level. After all, there were other savings institutions besides banks which shied away from NHA mortgages in 1956 and 1957 when their interest rate was out of line with rates on other assets. This was shown in Chapter 7 above.

The 1956 suggestion is also related to the difficulty experienced by the Bank of Canada in 1956, for example, in bringing the expansion of bank loans quickly under control through restraining the rate of increase of their cash. The banks switched out of government bonds and into loans as their cash increase was restricted.

As we have argued earlier in this chapter, the gross yield on loans is generally above the rate on government bonds and the rate on loans is much less sensitive than the rate on government bonds, so that in recession,

[42] Bank of Canada, *Annual Report, 1956*, pp. 30-31.

when demand for loans is reduced, the spread between the loan rates and government bond rates widens and this tends to be even more true of shorter term bond yields than of longer term yields. Nevertheless in the face of widening spreads, banks invest more in government bonds as the recession proceeds. It would clearly be more satisfactory if the yields of loans were more sensitive, though it would still follow that banks would invest more heavily in bonds in recession. When the demand for loans recovers, the banks are quick to meet this demand. If the central bank supplies cash they can meet it easily without reducing other assets. Otherwise they run off their liquid assests as they mature and sell off government bonds to meet the demand for loans. These developments are in themelves no cause for concern so long as inflationary pressures do not develop. But if demand recovers very quickly to the point of presenting the threat of inflation, the central bank must act quickly and in a vigorous way so as to restrain the increase in cash and force yields on government bonds up further and more rapidly; that is the only way to operate through transactions in the capital market to curtail the flow of funds to those demanding goods. We do not claim that this is easy, for the Bank has to bear in mind developments in the capital markets abroad, especially in the U.S., and it has to be careful on the one hand not to start its actions too soon and so choke off an incipient revival and on the other hand not to invite an anticipatory speculative demand for funds to be stored up before they become too expensive. Someone has rightly said that the monetary authorities must ever seek to walk a tight-rope!

Here we are confronted with one of the great dilemmas that reliance upon the price system presents us. In the interests of free allocation of resources we wish to rely on the price system, and this means allowing the switching of assets in response to changing yield differentials and minimizing the compartmentalization of the capital market. On these grounds it seems wrong to advocate further compartmentalization of the kind involved in the Bank's proposal for splitting off the savings departments of the banks. On the other hand, the switching is sometimes a response to or a support of speculative, destabilizing activity in the economy.

In the particular case of the dilemma under discussion it would seem that the resolution proposed may be too drastic and far-reaching. One suspects that it has been proposed as an alternative to a vigorous policy of forcing up interest rates on government securities rapidly to a point where they become attractive. The Bank of Canada has contended that "while there were periods of falling interest rates in 1956, the overall rise during the year was in the circumstances about as large and as rapid as could be digested without upsetting financial markets and investment practices upon which the successful financing of provincial, municipal and corporate capital expenditure depends as well as housing

finance".[43] We may recognize the problem of a dealer's trying to work off inventories of slower moving issues in a period of falling prices just as we recognized other difficulties connected with a rapid rise in interest rates under central bank pressure. But with all due respect to the very competent and sincere judgment of the Bank of Canada one must, in the absence of specific evidence that the bond markets were on the verge of complete demoralization in 1956, wonder whether interest rates might not in fact have been pushed at least a little higher a little more rapidly.

(viii) The agreement respecting liquid asset ratios adopted late in 1955 had as its primary objective, according to the Bank of Canada, that of forcing the banks to sell government bonds if they wished to expand loans. The Bank has stated in reporting on the agreement: "in the absence of a convention regarding minimum liquid asset ratios, at a time of great expansion in the demand for loans, a bank's selling of bonds may be postponed and the necessary funds raised by running down liquid assets".[44] The agreement was introduced at a time when the banks had indeed run their liquid assets down very considerably and had substantially increased their commitments to borrowers. It is significant that the banks had to be given several months in which to meet the requirement. Moreover the necessity of the banks to switch from bonds to bills in order to satisfy the terms of the agreement may have been one of the technical considerations of the Bank underlying its policy of not allowing interest rates to rise more rapidly in the first part of 1956.

The requirement of a minimum liquid asset ratio does of course put a limit on the extent to which the banks can run down liquid assets in order to extend loans. But it does not mean that in future the banks may not again be able to obtain funds for the extension of loans by running down liquid assets. In a future recession banks may accumulate liquid assets in excess of the minimum requirements and work the excess off in the subsequent boom.

It is our feeling that rather than a drastic policy of splitting off the savings departments of the banks, or permanent adoption of a fixed liquid asset ratio, the monetary authorities should argue the desirability of bank loan charges being more flexible over a wider range and should seek to induce changes in interest rates generally of the degree required and with such rapidity as is warranted in the circumstances. One way to make bank loan charges more effective might be for the banks to institute a charge for commitments. This might be stated as X percent per month. The price might be guaranteed for only a set number of months and vary directly with the number of months it is guaranteed. Secondary reserve requirements if in fact necessary might take the form of an undertaking

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[43] Bank of Canada, *Annual Report, 1956*, p. 25.
[44] Bank of Canada, *Annual Report, 1955*, p. 16.

by the banks to maintain an investment in government bonds of at least some specified multiple of their unused lines of credit.

There are other examples on the record of the use of persuasion, suggestion and advice by the Bank of Canada, but in the other cases, the persuading was directed primarily to groups other than the banks, such as the finance companies, stock exchanges and department stores.

Concluding Observation

In concluding this chapter, it is perhaps as well to recall that in spite of the legislation, and in spite of agreements of one kind and another, the commercial banks in Canada still retain a very large degree of independence. They have very considerable control over the distribution of their assets, they are allowed to develop their own methods of attracting funds and of attracting borrowers. They operate their own organization, the Canadian Bankers' Association, to protect their individual and collective interests and even the price fixing or collusive action to regulate rates in which the banks engage has been remarkably free of criticism.

PART V

CONCLUSION

9

THE CANADIAN CAPITAL MARKET

A. Introduction

In Chapter 2 we expressed the view that the strengths and weaknesses of the capital market may only be judged in relation to the objectives of economic policy. Venturing out of necessity into somewhat controversial territory, we set forth a group of objectives against which the performance of the capital market in post-war Canada would be considered in this study. We maintained that these objectives have been held in common, though perhaps with varying priorities, by the major political parties in Canada. These objectives are to maintain high levels of employment, to control inflation, to promote economic growth, to provide for defence, to raise minimum standards of social welfare and to so organize economic affairs that insofar as is consistent with meeting the other objectives, decisions as to what to produce and what to consume should be made by producers and consumers operating through free markets.

If the last of these objectives is to be served, the capital market, in particular, must exhibit certain technical characteristics. There must be fairly continuous trading in considerable volume in the assets exchanged in the capital market, those who supply and demand these assets must be sensitive to changes in their relative prices or yields, prices or yields of these assets must be free to move, and a host of so-called non-price barriers to the supplying and demanding of funds must be kept as low as possible. A considerable part of this volume has been devoted to the working of the price system in the capital market. In the first part of this chapter we shall review this material stressing the weaknesses in the price mechanism as it operates today and pointing to the developments which are serving to reduce or to increase their importance.

Following this review of imperfections in the capital market we shall then comment briefly on the problems of specific groups of fund raisers, in particular small businesses, home buyers and municipalities. Some wider aspects of monetary policy than those considered in Chapter 8 will be discussed

next in relation to imperfections of the capital market and the objectives of economic policy. We shall conclude the chapter with a reflection on the scope of the capital market and conflicts among the objectives of economic policy.

B. Imperfections in the Working of the Price System in the Capital Market

1. *The financial transactions of consumers*

Canadian consumers save rather high proportions of their incomes. A very large and undoubtedly increasing fraction of this saving is contractual in character however, being done in connection with the purchase of services. Part of it is repayment of debt incurred in connection with purchases of durables and houses. Part of it goes toward the purchase of insurance policies and acquisition of pension rights.

One characteristic of contractual saving is that during the life of the contract the individual saver has no choice as to the allocation of his funds among alternative outlets for saving. This restricts his sensitivity to changing differentials in yields. With respect to contractual saving one may also wonder whether, *at the time the commitment is made,* the consumer-investor is particularly sensitive to differential yields. On commitments to acquire debt we shall comment below. On commitments to defer the receipt of income or income and capital involved in life insurance and pension contracts the following may be said. In the case of employer pension plans, the plans are increasingly becoming compulsory conditions of employment so that the individual has *no* choice but to contribute. In the case of life insurance, available information suggests that though the insurance contract is, from one point of view, a contract to employ an investment manager, there is very limited awareness of this fact, and even if there were such awareness, it is a difficult technical job to compare the investment skills of insurance companies and to relate this to the premiums they charge and the dividends they pay.

A considerable proportion of consumers do no saving at all, but even among those who do save and who do acquire financial assets other than life insurance policies and pension rights, many, especially in the lower income brackets, consider only a very narrow range of assets for investment. Indeed, much of this non-contractual saving is residual in character and its investment is made on grounds of convenience rather than relative yields. There is undoubtedly widespread ignorance of investment opportunities and even of the methods of going about making an investment.

We tried to guess the proportion of funds moving out of the consumer sector that are moved by consumer-investors who could be presumed to be relatively insensitive to yields and we concluded that perhaps the proportion is as high as one-half. However, the important question is

whether "at the margins" there is sensitivity to changes in relative yields. We found that in general, the range of financial assets considered for individual portfolios is wider, the higher is the level of individual income. It follows therefore that such responsiveness to changes in differential yields as there is among consumer-investors is concentrated among those in the higher income brackets. But of course even among yield-conscious consumer-investors other considerations affect their investment decisions and temper their sensitivity to changes in relative yields. These other considerations include the tax advantages to be derived from some classes of investment as compared with others, costs of shifting the composition of portfolios and others, not to mention those referred to earlier that lead to contractual investment or saving.

Though there is a degree of sensitivity to changing yield differentials among consumer-investors, especially those with higher incomes, the capital market would be improved in its functioning if more consumers were sophisticated as investors.

Much of consumer saving flows to financial institutions. A large part of contractual saving is invested through institutions; much non-contractual saving is deposited with institutions and is in turn invested by them. This raises the question of the investment policies of financial institutions; we shall review our discussion of this question below.

We considered not only the sensitivity of consumers as investors to the relative yields of financial assets but also their sensitivity as borrowers to the costs of funds. We concluded that ignorance of the costs of funds is very widespread among consumer-borrowers. We contend that if consumers wish and are able to pay high costs of borrowed money in full knowledge of these costs, it is a proper function of the capital market to supply them. We contend equally however, that if consumers are unaware of the costs of the funds they borrow, there is a presumption that to some extent (what extent cannot be stated) funds and resources are misallocated. Suppliers of funds to consumers do not usually state the costs of the funds clearly. Indeed, consumers could not know these costs in most cases without making elaborate calculations that are beyond the abilities of persons not trained in the mathematics of finance. In many instances, other terms of the loan contract apart from the cost of funds, such as the monthly servicing charge, and the proportion of the amount borrowed to the price of the real asset being purchased, are given overriding consideration. In fact the possibilities of hiding increases in costs by extending amortization periods for example, make it easier for consumer finance companies to maintain or increase the volume of their loans outstanding even when they have to pay more for the funds they borrow. The insensitivity of consumer-borrowers to costs of funds may not only distort the allocation of funds by the capital market but may also frustrate the efforts of monetary authorities to restrain the increases

in credit in times of inflation. This frustration has been experienced in Canada and was heightened by the ability of instalment finance companies to develop or tap new sources of funds when traditional sources were curtailed (directly or indirectly) by the monetary authorities.

2. The financial transactions of non-financial business firms

The non-financial business sector of the economy is typically a net taker of funds from the capital market: its saving (through retained earnings and depreciation or similar charges) is typically less than its expenditures on new capital assets. Nevertheless, this sector of the economy does a substantial amount of saving. Moreover the individual saving units direct the funds they save to the financing of their own activities to a very considerable degree. This prevalent practice of self-financing in industry represents a circumvention of the capital market in that the funds involved in "self-financing" are raised in the goods market rather than in the capital market. Since the practice is so widespread we considered in some detail whether the presumption is warranted that it leads to misallocation of resources. We concluded, subject to qualified reservations about monopoly control of the prices of goods and services, that such a presumption is not warranted. This conclusion was fortified by the fact that in a great many instances firms finance a part of their requirements through the issue of securities in the capital market and thus in these instances investors in the capital market have an opportunity to express their judgment of the companies and their plans.

Later in this chapter we shall review some of the problems of financing smaller business enterprises, including the high costs of public issues of securities. We confine our remarks at this point to non-financial corporations generally.

There are many factors in addition to the relative prices of securities which must be weighed by corporations in arranging their external financing. We discussed a number of them and a few at considerable length in Chapter 6. Taxes of course have an enormous impact on corporate financial decisions. Not only do tax considerations in general favour debt over external equity financing, and common stock over preferred stock financing; but many of the detailed aspects of the law and regulations such as, for example, the rules governing depreciation and depletion allowances, affect the differences in prospective rates of return on new capital as among industries and as among concerns within industries and hence the relative demands for funds to finance the acquisition of new capital. The preferences of investors and the preferences and traditions of the companies must also be given due weight in decisions as to whether, when and in what forms, to raise new capital. There exist rather clear though flexible opinions among company directors or managers as to the structure of the balance sheet and the income statement; these are expressed

in terms of the ratios of dividends to net earnings, debt to equity, long-term to short-term debt, for example, and they affect corporate financial decisions.

However, within the limits imposed by taxes and business conventions, the choice of the form in which to raise funds externally reflects changing yield differentials. In a review of the data on new issues of corporate securities and the prices of such securities we could not contradict the hypothesis that "at the margin" there is a changing emphasis among the various forms of security offerings in response to changes in their differential yields. We emphasized however how unsatisfactory the data are and how much we are in need of fundamental research in this area in Canada. Even the concept of the cost of funds is hazy and ill-defined.

Bearing in mind that the capital market works to the best advantage when buyers and sellers of securities are well-informed, we emphasized the responsibility that rests upon corporations, to provide frequent and regular information to assist investors in judging the investment characteristics of corporate securities. There has been a considerable improvement in the frequency and quality of information supplied to investors by public companies. Further improvements are urged by the investors. The one most frequently mentioned is provision of quarterly statements. We can only condone legitimate pressure by investors for the information they need.

3. The transactions of financial institutions

The professional investment managers of the financial institutions, the trust companies, the life insurance companies, the investment companies, for example, are sensitive to changes in the differential yields. There can be no doubt of that. However, these professionals are required to work within certain rules. Some of the rules are embodied in legislation; some are embedded in the traditions of the companies. These rules *do* limit the reactions of the investment managers to changes in yields. The legislation and traditions governing many financial institutions serve to restrict the classes of funds into which institutional funds may flow and the amounts that may flow into permissible classes of assets. We reviewed these laws and customs in some detail in Chapter 7. Pervading the legislation governing trust companies and life insurance companies is a distinct bias against investment in common stocks. This legislation has been developed very largely for the purpose of protecting those who invest their funds in trust with these companies and there is no denying the need to afford protection. The question is whether the legislation is not in some respects overly protective. We concluded that in some respects it is. We welcomed the relaxation of trust legislation in this respect in Nova Scotia. We contended that some innovations in the insurance company legislation such as the so-called "basket clause" were forward steps. We argued in considerable detail however, in respect of life insurance

companies, that modifications in their own interpretation of their trusteeship might well benefit their policyholders and contribute to the better functioning of the capital market by widening the range of assets into which the companies' funds could flow and by thus reducing the compartmentalization of the market.

The Canadian banks, operating to a large extent as savings banks as well as commercial banks, are not allowed to invest in residential mortgages save those that are insured under the National Housing Act. The insurance companies on the other hand are large investors in mortgages even though such investments are exceedingly short term and contribute greatly to their over-all vulnerability to falling interest rates which derives from the short average term of their assets as compared with the very long mean term of their liabilities. There is a heavy weight of argument to support what undoubtedly would be regarded as a revolutionary view, that banks might be encouraged to increase the proportion of mortgages in their portfolios greatly and that insurance companies look increasingly to fields of longer-term investment. We hasten to add however that by the use of the word "encourage" we do not mean direct legislative tampering with the determination of prices in the securities markets; we mean only to suggest the gradual elimination of unnecessary or deleterious biases in the legislation and in institutional practice concerning institutional investment policy. The increasing institutionalization of personal saving demands that we reconsider from time to time the investment practices of our major financial institutions, in the interests of preserving and readapting machinery through which the free enterprise method of organizing economic activity can operate.

4. Imperfections in the markets for particular assets

The yields of many assets are slow to move or have a fixed ceiling. Thus charges on bank loans are slow to move and have a statutory ceiling. Bank and other institutional rates on deposits are similarly slow to move and fluctuate within a fairly narrow range. (We may now make an exception of bank rates on some non-personal notice deposits.) The N.H.A. rate on mortgages is subject to an administered ceiling (and only rarely has been at a figure other than the ceiling) and because of this we have had considerable difficulty with the housing programme at times. Similarly other mortgage rates are slow to move. The rates charged on farm loans by many of the government organizations are either fixed or are varied infrequently.

Some investments are relatively illiquid either by virtue of the character of the contract or the undeveloped state of the market in these assets. Investments in pension funds, including the individual retirement plans favoured by the tax legislation are exceedingly illiquid. Insurance policies, regarded as an investment are relatively illiquid. There is either a total

lack or lack of an active market in many financial assets such as N.H.A. mortgages, other mortgages, the bonds of smaller municipalities, especially serial bonds; markets in many provincial bonds do not show active and continuous trading and the securities of many smaller companies cannot be said to enjoy active markets.

5. Developments serving to increase the importance of imperfections

We have already referred to the fact that the increasing institutionalization of saving increases the importance of the imperfections arising from the limitations on the investment practices of the institutions. We regard this as a very important consideration. The institutionalization of saving arises partly from the purchases of assets such as insurance policies, pension fund rights, investment certificates, shares in investment companies and the like from the financial institutions. It arises also through the repayment of debt held by the financial institutions. The increased use of consumer credit increases the importance of imperfections in the capital market arising from the insensitivity of consumers to the associated borrowing costs. Similarly the increased relative importance of mortgage debt increases the relative importance of imperfections arising from the comparative insensitivity of home buyers to mortgage loan rates and the importance of the lack of flexibility of N.H.A. and other mortgage rates, and the lack of well developed markets in these instruments generally.

The fact that the needs of municipalities are growing so very rapidly increases the importance of the imperfections in the municipal bond market. The rate of increase of municipal debt has been greatly in excess of the direct debt of provinces, and of course there has been a considerable decline in the direct debt of the federal government. Undoubtedly the municipalities whose borrowing needs have increased most rapidly have been those on the fringes of rapidly increasing metropolitan areas which a few years ago were still largely under the plow but which recently have had to provide a full range of urban services. Probably the debts of older, built-up urban municipalities have increased less rapidly while those of rural municipalities have increased less rapidly still.

These considerations are weighty though expressed here in brief compass. In the post-war period in Canada there has been a continued shifting of personal saving to the institutions and there has been a shifting of outstanding debt toward consumer debt, mortgage debt and the debts of junior governments. These changes serve to emphasize some of the imperfections in the capital market. But there have been other developments serving to reduce the importance of some of the imperfections.

6. Developments serving to reduce the importance of some of the imperfections

Two general developments serving to reduce the importance of imperfections in the capital market may be cited first. The growth of the economy increases the amounts of some classes of assets outstanding and as amounts outstanding increase, markets in these assets tend to develop and trading in them to become more active. This is a very slow process of course. The outstanding debts of most provinces have increased during the post-war years as have the debts of most municipalities. The volumes of outstanding mortgages and corporation bonds have also increased. In addition to the growth in the volume of outstanding obligations there has been a development of specialized institutions serving special needs of investors and borrowers in the capital market. Among these institutions are the instalment finance companies, the investment companies, and private development banks. Although in some respects these newer institutions serve further to compartmentalize the market, they also in other respects serve to forge links among existing compartments in the market. For example, the instalment finance company has become a channel through which short-term corporation funds may flow into consumer debt. The investment companies provide a medium which greatly enlarges the range of assets which may be held by an individual investor. But these examples lead us to specific illustrations of ways in which imperfections in the capital market have been reduced in importance.

The investment companies which are still small by comparison with the large financial institutions are growing rapidly. They not only enable individuals' funds to flow to a wider range of assets than they could reach in the absence of such a pooling system, they also provide for the management of these funds by professional investors who are informed, and sensitive to relative yields. While the companies themselves impose some restraints on their investment policy (for example they do not take up the shares of new companies to any important extent) there can be little doubt that the rise of these companies has served, perhaps yet in a rather small way, to improve the working of the capital market.

Through the efforts of the Bank of Canada and the co-operation of the investment community, the market in treasury bills has been considerably broadened with the result that there is now a more efficient employment of short-term funds in the capital market, and the Bank of Canada has achieved some increase in flexibility.

Partly as a by-product of the development of the treasury bill market but also as a result of the increased demand for consumer credit and the emulation of techniques employed in other capital markets, the American in particular, the market in the short-term notes of finance companies has also been developed to some degree in Canada. There is not yet much trading in outstanding issues of these companies, but they

have been sold rather widely. While during the cultivation of this market by the finance companies, the monetary authorities may have been caused some temporary embarrassment in their efforts to restrain increases in credit, the development must be viewed in general as contributing to the greater flexibility and improved functioning of the capital market.

There has been some relaxation of restrictions on institutional investment practices. The removal of the requirement (imposed by the income tax authorities) that trusteed pension funds be invested in accordance with the regulations in the Canadian and British Insurance Companies Act, was a long stride forward. A very much shorter step forward was the introduction of the "basket clause" in the insurance acts. The pooling arrangements allowed by the legislation with respect to common trust funds and also adopted by the trust companies in respect of pension funds, employer and employee, represent an advance in that they widen the classes of securities which may be considered as candidates for the investment of these funds. The changes in the banking legislation to permit the investment of bank funds in N.H.A. mortgages on houses and in loans against other classes of durable goods are improvements though the guaranteeing or insuring of some classes of these loans seems an undesirable step.

While, as we have contended, the lack of markets in outstanding securities of several varieties is a weakness in the Canadian financial machinery, there have been some specific improvements in addition to the one in the treasury bill market to which we have already referred. One of these improvements is the very gradual development of a market in outstanding N.H.A. and other mortgages. These markets exist only in very rudimentary form as yet, but that they have developed at all is important.

7. *Efforts that may be made to remedy the imperfections*

There are a few specific measures which might be initiated at the present time to remedy, or to work in the direction of remedying some of the imperfections of the capital market.

The insensitivity of consumer-borrowers to the costs of funds may be impossible to overcome, but as we suggested in Chapter 5, we should at least take steps to ensure that individuals are informed of the rates of interest they are required to pay and informed in such a way that they may easily, without using slide rules, compare the rate charged at one source with the rate charged at others. If the suppliers of the funds themselves continue to display an unwillingness to advertise their charges clearly and effectively, it may be necessary to exercise Parliament's jurisdiction over matters pertaining to rates of interest and pass legislation requiring uniform, clear announcement of the rates of interest charged on loans to consumers, in terms of some common formula.

In view of the general lack of sophistication of individual investors, the educational activities of such bodies as the Investment Dealers Association are to be supported and promoted. In their way, investment clubs which have recently enjoyed considerable interest, can serve as educational enterprises and are to be encouraged for this reason. Ignorance of opportunities available and the specific methods of exploiting them is always a barrier to the proper functioning of the market. The freer and more frequent flow of information from companies to investors in the market that has been accomplished is helpful and to be promoted.

The professional investor in the capital market can contribute enormously to the satisfactory working of the market. It is for this reason that the institutionalization of saving need not of itself be deplored. If individual investors are able to make intelligent judgments of the performance of the various institutions and adjust the flows of funds to the institutions accordingly, and if the institutionalization of saving does not lead to the relative drying up of the flows of funds in some channels of investment, then the increasing propensity of individuals to commit savings to institutions is to be welcomed and encouraged.

The individual investor, however, who seeks to assess the investment performance of the various institutions faces considerable difficulty. Some of this difficulty arises out of the complicated variety of service provided by the institution. A life company for example provides protection as well as an investment service. But at least all life companies provide similar combinations of services so that the comparison of life companies with each other should not be impossible if information on costs of service were readily available. The increasing practice of selling participating policies renders the cost of insurance the more uncertain; it is granted that this cost over the life of the policy cannot be predicted accurately. But the insurance industry would be rendering a signal service and would contribute to the working of the capital market if collectively and individually the companies provided information on their past performance in a way which would enable unsophisticated persons to make more informed selections of the companies and insurance policies in which they invest. We have spoken particularly of the life companies, but in many ways the service they provide is the most complicated and difficult to evaluate of all the services provided by financial institutions.

To provide the basis for more intelligent commitments of funds to institutions is only one aspect of the problem of guaranteeing that the institutionalization of saving contributes to the effective working of the capital market. The other and perhaps more important aspect is to guarantee that the channels through which the funds flow from the institutions are kept free to carry funds moving in response to the forces of fluctuating yield differentials. To this end it is suggested that the legislation governing trustees be modified to give rather greater freedom to trustees in selecting

investments. It is suggested that the requirements of the insurance legislation respecting valuation of equities be changed so as to be less inhibiting to such investment, and that insurance companies be given greater latitude in the selection of their investments. It is further suggested that banks be permitted to invest in conventional mortgages.

There are restrictions on the movements of certain yields in the capital market which might well be eliminated in the interests of improving the market. Thus the ceiling on bank loan charges might be eliminated or greatly increased. The banks themselves might then be encouraged to make the rate on loans more responsive to the demand for loans in relation to the banks' supplies of cash. Similarly, the rates of interest paid on institutional deposits might be more flexible and indeed they could well become so if bank loan charges were not subject to a ceiling. The ceiling on N.H.A. mortgage rates might be removed and these rates determined by the forces of supply of and demand for mortgage funds in the mortgage market.

There are not many active measures that can be taken to develop secondary markets in outstanding securities. It may be however that not all avenues have been fully explored with respect to the market in mortgages, N. H. A. and otherwise. Have the institutions exploited to the full the discounting facilities offered by the Central Mortgage and Housing Corporation? The CMHC, the banks, and other approved lenders could supply blocks of N. H. A. mortgages to investors in various maturities, on properties in various parts of the country, and with servicing of the mortgage provided for. There would seem to be need for some method of guaranteeing or insuring titles to properties. It is important that the barriers to the development of this market be discovered and attacked.

Another area that is in need of study with the co-operation of the technical operators involved is that of costs of issuing and distributing securities. These costs operate as a barrier to public issue of securities by smaller companies and municipalities. Yet as we cited in Chapter 6, so eminent a financial authority as the Governor of the central bank has declared that we know all too little of the factors that contribute to the costs of security issuing. Surely this is a subject that is amenable to investigation. Any progress that could be made in reducing the costs of issuing and transferring financial obligations, and thus freeing the flows of funds would be to the advantage of all.

C. *Problems of Financing Particular Activities*

There are certain types of activity, the financing of which has been a matter of continuing concern not only in Canada, but in other countries as well. Perhaps the three types of activity about which this concern is most frequently expressed are small business, including agriculture, the purchasing of houses, and certain activities of municipal governments.

There is a persistent apprehension that the capital market does not adequately serve the small business man, the home buyer and the municipality. With respect to all case the feeling is that existing institutions, including investment dealers, are not able profitably to channel funds to support these activities at costs which the small businessman, home buyer or municipality can pay. Sometimes it is suggested that private institutional arrangements other than those existing in the market could profitably direct funds to these borrowers, at costs they could pay. Sometimes it is contended that (senior) government agencies should assume much of the risk involved in lending to such groups, so that suitable private institutional arrangements could profitably be made. It is also suggested on occasion, that special government agencies should be established to provide financial accommodation directly to small business, home buyers and municipalities. The problem of appraising the working of the capital market with respect to supplying these particular borrowers is complicated by uncertainty as to the precise extent to which as a matter of public policy it is desired to subsidize the activities of these groups.

The private lending institutions once supplied long-term credit to agricultural enterprises to a much greater extent than they do at present. Their experience, especially in the prairie provinces, during the depression with general defaulting and with moratorium legislation has led to severe apprehension over the risks involved in long-term loans to agriculture. Even before the depression, however, there were government lending agencies serving the needs of farmers and today, apart from the long-term credit supplied to farmers by individuals, by far the larger proportion of long-term loans to farmers is made by branches of governments. It would probably be generally agreed that there is an element of subsidy in the rates of interest charged on these loans. There is a feeling that the loans of some of the agencies might be made for somewhat longer terms and in some instances in rather larger amounts. These changes it is felt would render the existing machinery even more suitable for meeting the special problem of financing the change in ownership of farms which must be accomplished at least once each generation.

The banks are the principal suppliers of short and medium-term credit to farmers. They supply medium-term credit for the most part under the provisions of the Farm Improvement Loans Act under which the rate of interest is restricted to a maximum of 5 percent and the loans, up to a specified limit, are guaranteed by the federal government. The operations under this Act have been generally acclaimed a success. On may question whether it was necessary, in order to promote this form of lending to do more than permit the banks to take mortgages against the specific improvements being financed. However, there is undoubtedly in many cases an element of subsidy involved in the 5 percent charge, and the limited guarantee against losses is the specific compensation to the banks for assuming the risks at

5 percent. The banks supply short-term credit to farmers in the traditional Canadian way and of course subject to the 6 percent ceiling on charges.

All three of the kinds of suggestions for improving the supply of credit that we outlined above have been made with respect to small business. There was for example one specific proposal made before the Commission for the formation of a private Canadian Development Corporation.[1] This corporation, with an initial capital of some $50 million to $75 million would investigate and invest in new ventures large and small or existing small ventures unable to obtain adequate financing from other private sources. It was suggested that the corporation be prepared to supply at least a part of either equity or debt financing required in any particular venture and that it should sell investments when these had developed to the point where the interest of other private investors was assured.

This specific proposal envisaged a private organization which would interest itself in both large and small undertakings. It is a question however, whether such a development corporation would be likely to operate successfully in both fields simultaneously. There are a few private development corporations operating in Canada, most if not all of them as branches or subsidiaries of other organizations operating in other countries. It would seem highly likely that any Canadian private corporation of this kind would have to be prepared to extend its interest beyond Canada in order to achieve the volume and diversity of business necessary to permit profitable operation.

In 1944 the suggestion that a federal government lending agency with powers to supply capital directly to small and medium business concerns in Canada and to guarantee the obligations of such concerns if they are unable to raise funds in other ways, was adopted and the Industrial Development Bank established shortly after. In 1956, the President of the Industrial Development Bank stated: "We have been in operation now for ten years and we have barely earned interest on our money without paying income tax. We are specialists; we are permanent; we are in the business continuously. If some one else is going deliberately to set up a similar institution, they will have to put a lot of money into it and be content to wait a long time for any profits. I do not think that you could expect them to do that ... if we should have twice the number of loans then we would only have a 20 to 30 percent increase in our cost ..."[2] This statement indicates the difficulties that might be faced by a private development corporation. In addition to the federal Industrial Development Bank there are several provincial government agencies or arrangements for lending money to or guaranteeing the obligations of small business.

1 This proposal was made in the Statement by Mr. Gordon R. Ball, President of the Bank of Montreal, before the Royal Commission on Canada's Economic Prospects in Montreal on February 21, 1956.

2 *Minutes of Proceedings and Evidence*, Standing Committee on Banking and Commerce, House of Commons, May 1, 1956, p. 252.

Small businesses, frequently unincorporated, always relatively unknown, inevitably are at a disadvantage in the securing of capital as compared with large, incorporated, well-known firms. It cannot be otherwise. In Chapter 6 we took the view that the needs of small business are in general well catered for in Canada by the private lenders, institutional and otherwise, and by the government agencies.[3] Without subscribing to the rather extreme point of view put forward by the Governor of the Bank of Canada (in his *Annual Report* for 1957) quoted in Chapter 8 with respect to immunizing small businesses from the effects of credit restrictions in times of inflation, one may accept the political judgments underlying present government arrangements for assisting small enterprises as providing desirable supplements to the organizations operating within the price system for profit.

In the field of housing finance there is of course a variety of private institutions which supply funds to home buyers; there is also a very large flow of funds from individuals to home buyers. It is true there have traditionally been technical flaws in the mortgage market. Mortgages are not very liquid investments, because of the lack of markets in outstanding mortgage obligations. This may well have had a restraining effect upon some classes of investors and undoubtedly is a factor that is reflected in the yields of mortgages on residential buildings. While the activities of governments in the field of residential housing may in part be in response to the costs of mortgage loans, they have not been directed primarily to the improvement of the functioning of the market in outstanding mortgages though certain provisions of the federal legislation to which we shall allude have been designed to increase the liquidity of mortgages.

Over the last two and a half decades suggestions have been made and acted upon in Canada that additional lending institutions be permitted or induced to make residential mortgage loans, that the government guarantee loans by private institutions and that the government make loans directly to home buyers or otherwise directly finance residential construction. The outstanding example of the first suggestion is the one acted upon in 1954, namely that the chartered banks and the Quebec savings banks be permitted to make mortgage loans. However, the participation by banks in the residential mortgage lending field that was permitted was limited to loans made under the terms of the National Housing Act and insured or guaranteed (as in the case of Home Improvement Loans) by the government-operated Central Mortgage and Housing Corporation.

Ever since the passing of the Dominion Housing Act in 1935, the principle of direct government participation in and guaranteeing of mortgage loans against residential housing has been accepted in Canada. The

[3] Mention might also be made of the progressive character of the individual income tax structure and the lower tax on the first $25,000 of corporate income as measures which especially favour the expansion of small businesses.

precise formulae governing direct lending and guaranteeing of mortgage loans by the federal authorities have been changed from time to time; we cannot recount the details here. As matters stand now, the Central Mortgage and Housing Corporation guarantees loans made by approved lenders for new housing in accordance with the National Housing Act and also from time to time makes direct loans sometimes through approved lenders acting as agents. The direct loans are made to home-owners or owners of rental property ordinarily only when evidence is produced that approved lenders have declared themselves unable to make the requested loan as an insured mortgage loan under the Act. Direct loans are also offered to limited dividend companies and to companies in the mining, logging and fishing industries to finance the construction of low-rental housing units. There is provision in the National Housing Act for limited guarantee of rentals from rental housing projects. The Act authorizes the federal government to enter into agreements with provincial governments to acquire and develop residential land and to build housing accommodation for renting. The Central Mortgage and Housing Corporation may itself build homes and has done so for the Department of National Defence for example. In all of these and other ways the federal government or its housing corporation participates directly and indirectly in supplementing the ordinary working of the capital market in providing funds for the finance of home construction and ownership.

Though the principal federal government activities in the field of housing finance have taken the form of direct lending or guarantees of loans, there was an important provision in the National Housing Act of 1954 directed toward encouraging the development of a secondary market in NHA mortgages. This Act provides that if an NHA mortgage is sold, the insurance policy may be assigned to the purchaser if the loan continues to be serviced by an approved lender. The Act also provides that the Central Mortgage and Housing Corporation may buy and sell insured mortgages or lend on the security of insured mortgages. These provisions have resulted in some transfers of NHA mortgages as we reported in Chapter 8.

We do not propose to debate here, especially as we have not been able to develop the background facts and issues in the earlier part of the volume, the merits of the specific government measures that have been taken in the field of residential housing and its financing in Canada. There has been a general feeling that the working of the free market would not produce satisfactory results in this area. As we have mentioned, the risks involved in mortgage lending are reflected in the charges made by private institutions for mortgage loans. It has been felt in addition that private sources of funds did not adequately serve the needs of those who desired smaller homes, or low-rental accommodation. It has been felt that the costs of providing private mortgage financing in some of the smaller or more remote areas were higher than home buyers in those areas should

have to bear. It has also been felt that government should take a special interest in the quality of housing supplied, in over-all community development and in the rebuilding of blighted areas in the major urban centres. The entry of the banks with their far-flung system of branches in small localities as well as large, in the mortgage lending field, would, it was hoped increase the flow of funds in support of housing in both small and large centres. The direct lending programme has been aimed particularly at providing housing finance at relatively low cost in small and remote areas for lower income families especially. The guarantee or insurance of NHA mortgage loans has likewise been designed to reduce the cost of home ownership and the cost of rental accommodation for lower income families. The fixing of the ceiling on NHA loans has sometimes created difficulties in this programme of supplementing the flows of funds from private suppliers. The Central Mortgage and Housing Corporation has itself remarked in reference to conditions in the market in 1957 when interest rates in general were moving up that "while interest rates and other terms on conventional mortgages were free to move in response to market pressures, they did not change as easily as, for example, bond yields. As a result, institutional investment in conventional mortgages declined in 1957. There was a much greater decline, however, in institutional activity under the National Housing Act, where a maximum interest rate is operative. *This rate was increased from 5½ percent to 6 percent at the beginning of 1957 but the effects of this higher rate were short-lived. As interest rates moved up from March onwards, mortgage loans under this Act again lost their attractiveness as investment opportunities.*"[4] It was as a consequence of this development, of course, that the direct lending programme of the corporation was vastly increased in 1957. It may well be desirable for the government to assume some of the risks of mortgage lending in order to reduce the relative costs of mortgage funds, but it unnecessarily complicates the working of the capital market and the supplementary programmes, to introduce rigidities of prices. Of course, the intervention of the federal government in the field of housing finance has increased the flow of resources into housing, and has affected the composition of the nation's stock of housing. Some may be apprehensive as to whether we have created even greater problems of slum clearance for the future. Others may be apprehensive lest the changing size of family has been inadequately anticipated in the housing programme. Certain it is that by concentrating its lending facilities on new, as opposed to existing houses, the building of new houses has been emphasized rather than the reallocation of existing housing accommodation. This has served the objective of stimulating employment in the housebuilding industry; it has also raised land prices and hence the total costs of new houses especially in the larger centres. But we must not pursue these matters here. We have argued that the housing programme should supplement and facilitate the working of the

[4] Central Mortgage and Housing Corporation, *Canadian Housing Statistics*, Quarter 4, 1957, p. 5. Italics added.

price system and not supplant or hinder it. We would feel that the freeing of the NHA mortgage loan rate, and further efforts to develop the secondary market in mortgages would be consistent with this injunction. The entry of the banks into the field of mortgage lending is surely to be welcomed but not the limiting of their participation to NHA loans. Further study leading to specific measures to facilitate financing of the transfer of existing houses to new owners would seem to be most desirable in the light of the broader objectives of the housing programme.

The sale of municipal bonds to private investors presents many of the same problems as the sale of the obligations of smaller businesses. The issuing bodies are small and not widely known in the vast majority of cases; the volume of outstanding issues is small and held largely by institutions or local buyers so that the market for the securities is inactive; consequently most municipal bonds are highly illiquid. Just as smaller businesses are inevitably at a disadvantage, in general, relative to larger businesses in raising funds publicly, so the smaller municipalities are at a disadvantage relatively to the larger ones in placing their securities. The larger municipalities are better known, there is a greater volume of their securities outstanding and they can interest a wider range of buyers. The larger municipalities in Canada, when interest rate differentials warrant, borrow in the New York capital market for example.

The problems of distributing obligations of Canadian municipalities have received urgent attention from time to time for generations in Canada. To refer only to recent years we may mention the period of the Great Depression in the nineteen thirties when soaring relief costs of the municipalities vastly increased their need to borrow at precisely the same time as revenue sources were much less productive. In the post-war period, municipal revenues have increased but the backlog of required municipal improvements and educational facilities stemming from the privations of war and the continued growth of the population and increased size of families has again vastly increased their need to borrow.

The provincial governments in Canada have adopted a variety of schemes to assist the municipalities with their problems of financing. These include direct grants to municipal authorities for specific purposes, guaranteeing of bond issues and direct lending to municipalities. It would be much too large a task to explain the details of present arrangements in each of the ten provinces, but we may offer illustrations of provincial assistance. In Ontario, for example, where no municipality may make any expenditure requiring levies to be imposed in a future year without the approval of the Ontario Municipal Board, the Ontario Municipal Improvement Corporation may purchase debentures, including school debentures from municipalities, under certain conditions. Under the Department of Education Act, the province may, again subject to certain conditions, guarantee payment by the province of any debentures issued by an elementary

school board in Ontario or by a municipality in a territorial district. The province may also make direct grants in aid of municipal projects of various kinds. Thus in Ontario, the province assists municipalities by direct grants, by guaranteeing some debts and by direct purchasing of some other debts. It might also be suggested that the very procedure of requiring approval for debenture issues is designed to enhance their marketability, as well as for other purposes. In Alberta, for several years, in addition to providing direct grants towards municipal, school and hospital operating costs, the province directly, or through the Municipal Finance Corporation has purchased out of current revenues practically all of the funds borrowed by municipalities, schools and hospitals. In 1958 however, the province suspended the operations of the Municipal Finance Corporation, temporarily at least, and local administrative bodies accordingly have once again offered debentures to the public. The province stands ready, though, to "bid on issues which may not attract reasonable bids on the open market."[5] Although the degrees of assistance and the formulae for providing it to municipalities differ as among the provinces, every province provides assistance in some form. The guaranteeing of debenture issues as to interest or principal or both, and the providing of direct loans are common practices; in some provinces special Crown bodies have been established with the power to issue securities in their own right and to use the proceeds to provide loans to or purchase the debentures of local authorities.

Undoubtedly there are directions in which improvements in the methods of issuing and distributing municipal debentures could be sought. Municipalities have limited freedom in their choice of times at which to issue their long-term debt and of the forms in which to issue it. Each debenture issue must be for a certain specific amount and specific purpose and usually has to be approved by a vote of the taxpayers or by some provincial administrative authority. There is some question whether, especially among the small local authorities, there is available the technical expertise in financial matters that would permit maximum advantage to be taken of such flexibility as there may be. While provincial authorities and investment dealers are sometimes consulted on technical aspects of the issues and their placement it may be that study would reveal possibilities of increasing flexibility as to timing and form of issues and of increasing the use of technical advice on the best ways of exploiting such flexibility. Unquestionably it is necessary to limit the freedom of local authorities in making commitments for debt, but administrative necessities should present the lowest possible barrier to the making of advantageous financial arrangements. The question of how the purchasers of municipal securities appraise the credit worthiness of the issuers is one which would repay some study. Just as the issuers of the securities are not always well advised or informed so too it may be that the rules-of-thumb employed in rating

[5] Alberta Government, *Press Release*, January 18, 1958.

municipalities as credit risks operate to the detriment of some issuers. Undoubtedly an unfortunate experience in a municipality's financial affairs is long remembered by the financial community. The factors that enter into the costs of issuing and distributing municipal securities are as little known as the factors that enter into the costs of distributing the issues of smaller corporations; these too, would perhaps repay study. It seems clear that in general investment dealers do not press the sale of municipal bonds to individuals; individuals seem to acquire their municipal bonds through the banks. If the marketing methods could be improved the resulting gains would be worthwhile. The municipalities would gain an advantage, in the short run at least, if they could issue rather longer-term debt against the longer lived improvements they undertake. One obstacle here that is applicable in some instances is provincial government restriction against the issue of 35 or 40-year debentures by municipalities. Another obstacle seems to be a lack of interest in debentures of such terms on the part of security buyers. We have argued that this lack of interest is not, for some buyers at least, wholly reasonable. It would be of some technical assistance in setting prices or making bids if there were a larger supply of 35 to 40-year Government of Canada bonds in the market, but the one such issue attempted in recent years by the federal government was not an unqualified success. In the Budget in the spring of 1958, municipal authorities were granted exemption from the federal sales tax on certain selected items. In the United States, interest earnings on the bonds of local authorities are exempt from federal income tax. Such a scheme would tend to lower the yields on municipal securities but the extent of this advantage to the municipalities would be limited by the attendant reduction in the attractiveness of such securities to certain buyers, such as the life insurance companies who are now important holders of municipal bonds, because of the special status of these companies under the income tax law. The scheme discriminates sharply in favour of individual investors with very high incomes.

Smaller municipalities do suffer certain disadvantages in raising funds in the capital market, and given the objectives of maintaining and improving the social services supplied by municipalities, the case for assistance from the senior levels of government is a strong one. It may be argued that the financial capabilities of the municipalities have not been fully exploited. For example, the rates charged for certain municipal services such as water service are ordinarily not high enough to render the provision of these services self-supporting and accordingly such rates might be raised. Similarly there are taxes, such as taxes on motor vehicles, that might be levied by municipalities to enhance their revenues. Moreover, inasmuch as municipal tax receipts have declined as a percentage of personal income since the late thirties, there may be room in many if not all municipalities for further increases in real property taxes. On the other hand, if municipal taxes have declined as a percentage of personal income since the pre-war

period, the same cannot be said of the tax receipts of other levels of government or of all levels of government taken together. But recognition of these aspects of municipal finance suggests that the fundamental problem of municipal finance, viewed in the large, is the problem of matching the allocation of functions with the distribution of financial capabilities among the various levels of government so as best to provide for democratic administration of public affairs. We in Canada have to make new fundamental decisions on this high plane. After these decisions, such problems of issuing municipal debentures in the public capital market as may remain will appear in a new perspective.

D. Further Aspects of Monetary Policy

In Chapter 8, we discussed specific aspects of central bank influence over the activities of commercial banks. We wish here to reflect briefly on certain wider aspects of central bank policy.

Looking back over the record of monetary policy in the post-war years, one wonders whether the authorities may not at times have been either too forward looking or too backward looking. In the world of economic affairs where cycles follow upon one another in succession, it is hard to be sure sometimes whether a policy that is not appropriate is the result of looking too far ahead or of looking back. It is possible to debate whether the timing of changes in monetary policy in the post-war period was always propitious. If we go back to the time of the reduction of Bank Rate in 1944, and think of the subsequent policy up to the withdrawal of the rigid support of government bond prices in early 1948, it seems as though the authorities, although aware of several complicating considerations, were seized of the idea that a post-war recession was inevitable and that monetary policy should seek to prevent it. We thus had an easy money policy in Canada without the slightest indication that recession was developing. To this it may be replied that the fact that no recession did set in is a tribute to the farsightedness of the Bank of Canada. The obvious rejoinder, however, is that we paid a very high price in terms of inflation of prices for the insurance against recession, if indeed monetary policy did provide such an insurance. Gradually, over the post-war years, with successive waves of inflation, the Bank of Canada became progressively more vigorous in its attacks on inflation, to the point where, after the first quarter of 1957 when recession threatened and then emerged, some began to feel that the Bank was anticipating the next wave of inflation when in fact it should have been exercising less restraint on the increase of the money supply.

We examined the dating of these policy changes (up to the end of 1956) in Chapter 4 and there is no need to review it here. As we emphasized in Chapter 4 it is always much easier to look back on events and suggest what should have been done than it is to anticipate events and

suggest appropriate policies. Moreover, economic stabilization is only one objective of monetary policy. We shall refer to the variety of monetary policy objectives below.

If in thinking back over policy in the post-war years it appears as though policy was sometimes too forward-looking or too backward-looking, it also appears that at times policy moves, though in the right direction, were not pursued with sufficient intensity. There seems to have been some feeling that interest rates, within specified periods, should move only within rather closely circumscribed limits. In his 1956 *Annual Report* the Governor of the Bank of Canada wrote:

> "While there were periods of falling interest rates in 1956, the over-all rise during the year was, in the circumstances about as large and as rapid as could be digested without upsetting financial markets and investment practices upon which the successful financing of provincial, municipal and corporate capital expenditure depends, as well as housing finance."[6]

In his report for the next year the Governor stated:

> "Continuation of the total demand for capital even on the 1958 level means that the requirements of the Canadian economy for capital, in real terms as well as in money terms, will continue to exceed by a considerable margin the over-all rate of saving in Canada. The difference must be obtained abroad if the present rate of capital investment is to be maintained. This is not a problem which can be solved by an excessively easy money policy or artificially low interest rates — on the contrary, such monetary developments would discourage the growth of domestic saving and choke off the flow of funds needed to pay for our import surplus. If an early readjustment of the Canadian economy to a lower level of capital investment, i.e. to a lower rate of growth, is not desired, the continuation of a high rate of growth (higher than that in the outside world) requires a sound money policy and an interest rate structure which will encourage both a high level of domestic saving and a sufficient inflow of outside capital to make up whatever deficiency remains."[7]

This last quotation may be based on the unstated assumption that any unemployed resources in the economy will be quickly re-employed in spite of relatively high interest rates. Otherwise it must be interpreted as a most unusual argument to the effect that relatively high interest rates would of themselves help to increase the employment of resources. The two quotations taken together with the record of the Bank's policy, suggest reluctance to countenance rapid and substantial movements of interest rates. We recounted in Chapter 4 the facts that in the first wave of inflation

6 Bank of Canada, *Annual Report, 1956*, p. 25.
7 Bank of Canada, *Annual Report, 1957*, p. 11.

massive support was given to the bond market especially in 1947 and to a lesser extent in 1948 by purchases of government bonds by government accounts and for purposes of retirement, that in latter 1950 and early 1951 the rise in interest rates was mitigated by retirements of government debt and that in 1956 the government not only used its surplus but drew down its deposits to retire debt. It is often suggested, especially by ministers of finance, that a government surplus is necessarily a good thing. But the merits of a government surplus need to be argued in more detail than that! If a government surplus arising from an excess of tax receipts over current expenditures is used in periods of inflation to retire debt held by those who are prone to use the proceeds directly or indirectly to finance demands for new goods and services, the deflationary effects of the surplus are offset, in some degree at least and the pressure in the capital market is correspondingly diminished. Alternatively, if the government surplus is lodged in deposits in the chartered banks, and retiring government debt is replaced with new issues, the pressure on the demand for goods is diminished and the rise in interest rates is correspondingly greater. If it is felt that through the exercise of monetary policy in a period of inflation interest rates are already rising as rapidly and as far as can be "digested" there can be no substantive argument against retirement of government debt; on the other hand, if the judgment as to what the capital market can "digest" underestimates the gastronomic capacities of the market, the use of the surplus (not to mention deposit balances) for retirement of debt misses an opportunity to link debt management policy with monetary policy for the more effective control of inflation.[8] This writer inclines to the view that the capacity of the market to absorb increases in the rates of interest in a period of inflation is a very difficult matter to judge, involving guesses as to the expectations held in the capital market, but that, perhaps monetary and debt management policies might have been combined to exert rather more upward pressure on government bond yields at certain times during the post-war inflations in Canada.

We may remark parenthetically in passing that in a growing economy an absolute reduction in the size of federal government debt is not necessarily to be desired. If the proportion of federal government debt to the total of outstanding debt were progressively to decline, rather drastic changes in institutional practices and arrangements for the exercise of monetary control would have to be made. After all the central bank deals almost exclusively in federal government obligations.

The Bank of Canada in pursuing monetary policy operates under several restrictions. It has responsibility for making such contributions as it is able to achieving the broad objectives of controlling inflation and maintaining high levels of employment. But it has also to consider the impli-

[8] It is of course possible in principle for the monetary authorities to offset the effects of debt retirement or to use the government surplus for the purchase of bonds even more reluctantly and so induce a more rapid rise in interest rates if it so desires.

cations of its actions for exchange rates and to work within the limitations imposed by developments in the goods and capital markets abroad. The Bank has also responsibility for maintaining what are usually referred to as "orderly conditions" in the market for federal government bonds and for assisting in the distribution of these bonds. Moreover, in the conduct of its policies it has to work through the capital market which has imperfections which impede its operations in certain important respects.

If the Bank of Canada should follow a somewhat tighter monetary policy than is being followed in the United States so that interest rates in Canada are higher than those in the United States by more than they otherwise would be, funds will be attracted to the Canadian capital market or Canadian borrowers will be inclined to seek funds in the United States (New York) capital market, and the Canadian dollar will rise in value in terms of the United States dollar. Conversely if the rates of interest in Canada are maintained at levels below those in the U.S. or even below the differential investors tend to expect, the value of the Canadian dollar will tend to fall. The effects on the exchange rate of different degrees of monetary stringency in the two countries (to limit our discussion to the Canadian and American capital markets) are induced not only by transactions in financial assets but also by transactions in goods and services. To put the point quite generally, if, in periods of inflationary pressures, prices rise less rapidly in Canada than in the United States then there will be some tendency for Canadian exports to the United States to increase and for Canadian imports from the United States to decrease, and if the responsiveness of exports and imports to changes in relative price levels are sufficiently great, the effect will be to enhance the rate of increase in the value of the Canadian dollar. If in periods of deflationary pressures, prices fall more rapidly in Canada than in the U.S. again, there may be some expansion of exports and contraction of imports, or a smaller contraction of exports than of imports, and if the responsiveness of exports and imports to changes in relative prices are sufficiently great, the value of the Canadian dollar would receive some support from transactions in goods and services. The cases we have cited are merely illustrations of the international interconnectedness of price levels, interest rates and exchange rates. This interconnectedness must be constantly weighed by the monetary authorities in deciding upon the appropriate monetary policy. A free as opposed to a fixed exchange rate probably allows greater freedom to the monetary authorities in deciding upon domestic monetary policies. Operations of the Exchange Fund Account, designed to offset temporary disturbances in the exchange market, may present technical and temporary problems to the monetary authorities in their management of the domestic money supply.

The central bank must assume certain responsibility for the marketing of federal government debt and in any event, the character and distribution among holders of outstanding debt in the market must be reckoned

with by the Bank of Canada in deciding its policies and the precise means of carrying them out. We do not propose to go into these highly technical matters here. We have already remarked on one aspect of the intimate relation between debt policy and monetary policy by reference to the retirement of debt out of the proceeds of a government surplus in times of inflation. If the government surplus is used to retire debt that is not held by the central bank itself, during periods of inflation, then monetary policy should accommodate itself to this debt policy, and recognize that there is less deflationary effect of the government surplus, than there otherwise would be.

The direct effects of the issue of government securities directly to the central bank, or to the chartered banks, or to the general public on the money supply are different in all cases. The decisions as to whether to borrow from the banking system or the general public are then of material significance for monetary policy. Monetary policy in times of inflation for example could be frustrated by extensive direct government borrowing from the banking system. Even the issue of securities to the public ordinarily requires that the monetary authorities see that enough cash is available in the banking system to enable dealers to obtain necessary accommodation during the period when the securities are being floated. The precise amount of "dressing of the market" that is required will depend in part on the yield of the new securities in relation to existing and expected yields on outstanding government and other securities. If a government issue is priced to yield a rate considered too low by the market, the monetary authorities will have to supply cash to enable the securities to be absorbed by the banking system or held by the dealers pending ultimate distribution if the issue is not to fail. The issuing of government securities is less likely to interfere with general monetary policies in times of recession than in times of inflation.

The structure of the government debt by maturities and by characteristics affecting marketability is also important for monetary policy. By and large it is desirable that the maturity distribution be more rather than less even. If a large proportion of the debt matures at any one time, that time may or may not be convenient for a large refunding operation, and one cannot be sure years in advance precisely when it will be convenient to refund debt. (This is of course the advantage to the authorities of optional call dates.) The Canadian government debt had developed a very low average maturity before the major refunding operation announced just as these paragraphs are being written (July 1958). If the structure of the debt by maturity is very uneven, there will not be as broad a distribution of the debt in the market as otherwise and accordingly the technical conditions for successful working of the market in these securities will not be satisfied. For example if there is a shortage of long-term bonds in the market, trading will not likely be active or prices reliable indicators of the conditions of demand and supply. Similarly, too high a proportion of non-

marketable government debt will inhibit the functioning of the market for the rest of the debt, and the operations of monetary authorities and others in that market.

The responsibilities of the monetary authorities as debt managers are important responsibilities and conditions in the market for government debt may greatly facilitate, or seriously hinder the execution of monetary policy.

The central bank in carrying out monetary policies is limited by the imperfections of the capital market. The traditional monetary policy, as we shall call it, of depending very largely upon open market operations as the vehicle for the execution of policy measures depends for its success upon a smoothly functioning capital market in which reactions to changes in prices are stabilizing rather than aggravating and in which the other technical conditions for the effective working of the price system which we enumerated are satisfied in high degree. However, as we have seen, the capital market is not a perfect mechanism and accordingly the need is felt from time to time to supplement the traditional method of open market operations with other measures.

One of the most profound and perplexing obstacles to the conduct of monetary policy is the state of expectations in the capital market. Given actions by the authorities can for a time produce results diametrically opposite to those intended if the expectations of the market have been misjudged. These destabilizing results of expectations aggravate the conditions it is desired to correct and may greatly delay accomplishments of the objectives sought. If for example, in a period of rising demand, some monetary restraint is induced by central bank, there may result an expectation of much greater restraint and a speculative increase in the demand for funds and for goods which may considerably aggravate an otherwise mildly inflationary situation. There is no need to elaborate this point with a multitude of examples.

The success of traditional monetary policy depends upon the presence in the capital market of buyers and sellers of financial assets who are sensitive to changes in differential yields and who will shift their demands for assets from those whose yields have risen less to those whose yields have risen more, and who will shift their demands for funds from sources whose costs have risen more to those whose costs have risen less. Not only must there be this sensitivity to changing relative yields and costs, but there cannot be a high degree of compartmentalization of the market. Holders of assets must hold or be in principle willing to hold overlapping groups of assets; otherwise there can be no mechanism whereby increases in the prices of one obligation can spread to the prices of other obligations — either of the same debtor but of different maturity or of another debtor and of the same or different maturity.

In general, we found that there is a substantial degree of sensitivity to relative yields and costs in the market especially among the professional borrowers and lenders, but that even the professionals are often limited in the degree of sensitivity they can show by the legislation and tradition that governs their practice. This implies a degree of compartmentalization of the market. We also found that there has been a shift in the relative weights of various kinds of obligations outstanding serving to emphasize classes of debt issued by those who are inclined to be rather insensitive to the costs of borrowing. We noted that in the ordinary working of the capital market certain classes of borrowers are less well-favoured than governments feel is desirable.

All of these limitations and considerations have been adduced by writers in support of the case for controls over specific kinds of credit — "selective controls" as they are often called. They have also led the monetary authorities in Canada to make various suggestions not only to banks, but to finance companies, stock exchanges, department stores and others concerning the granting or using of specific types of credit. At specific junctures in the developing economic situation it is acceptable and desirable for the monetary authorities to make suggestions of this kind as *temporary* expedients, if there are no alternatives available to them in carrying out the responsibilities given them under the Bank of Canada Act. But the Bank of Canada Act does not give the monetary powers in this country the authority to interfere directly and *permanently* with the allocation of resources. Selective measures to influence the outstanding volume of credit of particular kinds inevitably interfere with the allocation of funds and resources that would have been made in the absence of these measures. Frequent resort, even through the method of suggestion and persuasion to the use of such measures should evoke a demand that the Bank of Canada Act be reviewed and the powers of the Bank be stated more explicitly. To grant permanent powers to the Bank of Canada or to any agency of Parliament or of the government to influence the allocation of resources directly and continuously would be to reduce drastically the priority given to the objective of having economic decisions taken in the market place. The alternatives to greater reliance upon selective controls, if we adhere to our economic stabilization objectives, are to improve the working of the capital market and hence of general monetary controls so far as that is possible and to place greater reliance upon fiscal regulators of the flows of funds.

The task of the central banker is exceedingly difficult. He must exercise an uncommon degree of foresight, reconcile policy objectives that are frequently in conflict and work through an imperfect capital market in his efforts to control it. It is always possible to be critical of the monetary authorities, especially in retrospect. It is in constructive mood that the retrospective criticisms above have been offered.

E. The Scope of the Capital Market and Conflicts among Policy Objectives — A Final Word.

Early in this volume, in Chapter 2, we cited several objectives of public policy in the light of which the performance of the capital market might be judged. We have concentrated attention on the objective of having decisions made in the market place and have considered the working of the system in relation to this objective in particular. It is perhaps appropriate at this point to observe that an increase in the degree of priority given to other objectives of economic policy may restrict the scope of the capital market — and indeed of markets for assets generally — financial and non-financial.

Over the last 50 years, say, in many western countries we have given increasing powers to governments to claim a share of the national income for us and to influence the allocation of resources. Governments buy most of their resources in the market place of course. Some of the funds with which they buy them they also obtain in public capital market. But when, through the polling booth, people cede authority to governments to provide this service and that (including defence, welfare services, and the services of the various forms of social capital), to subsidize this activity and not that, the allocation of resources to these ends is not made essentially in the market place. While the costs of goods and services, and the cost of funds influence in some degree the precise character and extent of the social services and social capital which governments will decide to supply as they interpret their mandates, it cannot be said that these market influences are predominant.

The priority given the objective of promoting economic growth may also affect the scope accorded the capital market. If in the pursuit of the objective of economic growth it is decided for example to adopt tax policies and indeed selective monetary measures which favour the accumulation of capital goods as opposed to the production of some or most consumer goods the authority of the market place over decisions as to what to produce is diminished. There is considerable evidence that in the post-war period we did in fact in some respects limit the authority of the market place in pursuit of high rates of economic growth.

We have argued already in this chapter that the degree of priority given the objectives of maintaining employment and containing inflation also affects the scope accorded the capital market. We have problems of unemployment and inflation precisely because of the inability of the price system to guarantee full employment of resources without inflation. But beyond this, other limitations or imperfections in the capital market impede efforts to provide stability to the economy through traditional monetary policies, and lead to the demands for more selective credit controls which interfere with the allocation of resources by the market.

In the post-war years many of our economic objectives have been served remarkably well. It is true that we have had substantial inflation of prices, particularly in the earlier years. But we fortunately had very little unemployment in the first 11 years, standards of living have risen, minimum standards of social welfare have risen, and we have provided for the defence of the nation. Indeed in practically all of its dimensions we have enjoyed a very high rate of economic growth. It is obvious that our financial machinery for eliciting funds from residents and non-residents alike to finance vast increases in capital expenditures and expenditures by governments and consumers cannot be grossly deficient, or we should never have recorded such stupendous achievements in these post-war years. This is the clear and overriding judgment that must be given.

But there are deficiencies in the operation of the capital market. Some of these deficiencies can and should be removed in pursuit of the objective of allowing economic decisions to be made in the market place. The pursuit of other objectives may restrict the scope of the market. This may be wholly desirable — decisions in the market place may not provide for stability or for social capital, social services and defence, or for growth in productive capacity in the degree desired. But in pursuing these other objectives let us not unnecessarily restrict the scope of the market place — indeed, let us not unnecessarily sacrifice any objective in favour of others.

The future will involve us in continuing reappraisal of the basic objectives of our policies. We should take care that in this continuing reappraisal, freedom is not sacrificed because of failure to recognize and to take the steps that are possible to protect it.

PART VI

THE NATIONAL TRANSACTIONS ACCOUNTS FOR CANADA

THE NATIONAL TRANSACTIONS ACCOUNTS FOR CANADA, 1946-1954

Prepared by: L. M. Read, S. J. Handfield-Jones and F. W. Emmerson

Preface

PREFACE

THE NATIONAL TRANSACTIONS ACCOUNTS for Canada presented in detail in this part are conceived as an extension of the National Income and Expenditure Accounts which have now become widely used in economic discourse and analysis. These latter accounts concentrate on the flows of currently produced real goods and services. They show, for each sector of the economy, the income received from productive activity and the expenditure made in purchasing the output deriving from that activity. They also show the amounts of certain "transfers" of income. Some sectors of the economy save, that is spend less than current income on newly produced goods and services; other sectors dissave. Income and purchasing power are transferred among savers, among dissavers and from savers to dissavers through transactions in financial assets, and also through transactions in existing real assets. These transactions are not detailed in the income and expenditure accounts, but are, insofar as data and time for research would allow, in the accounts presented below. The National Transactions Accounts thus bring together, within a consistent conceptual framework, data on the flows of real goods and services and on the flows of financial assets.

A very considerable contribution to the development of income and expenditure accounts for Canada was made by the staff of the Rowell-Sirois Royal Commission on Dominion-Provincial Relations some 20 years ago. Perhaps it is only a coincidence that developmental work on the extension of these accounts from the real to the financial groups of transactions should also have been done under the auspices of a royal commission. The work on the income and expenditure accounts was subsequently carried forward to its present excellent and useful state by permanent branches of the government. If the preliminary work on the extension of these accounts reported upon here is to be carried forward to a similar state, it will, in all likelihood, also have to be done largely by permanent research organizations within the government.

It must be emphasized that the accounting of financial transactions given below is the result of pioneer and preliminary work, using for the

most part such basic statistics as were at hand. It has served to weld these existing financial statistics within a common conceptual framework and to relate them to our data on the flows of goods and services. In so integrating the financial data the work has set the weaknesses and gaps in our present financial statistics in some relief. This in itself is a worthwhile contribution. In the textual material presented in this part, attention is drawn to many of the shortcomings of the basic statistics that have been encountered in constructing the accounts. Our data on the financial transactions of consumers are particularly poor; financial statistics relating to non-financial business, incorporated and unincorporated, and to municipalities leave much to be desired.

If greater usefulness of statistics of income, production and financial transactions, in analyzing and forecasting economic developments is to be realized, it seems imperative that the preliminary work reported upon here be taken up by others, within the government and outside, and carried forward. It is now possible to state fairly precisely the next steps that need to be taken. Very briefly these next steps are the following. The annual accounts need to be brought up to date, and experience gained in their use in analyzing current developments. This step will suggest modifications and improvements in the concepts employed and it will further indicate and emphasize the needs for more complete and accurate data. The weaknesses in the data should be studied and plans laid for improving the quality and amount of the basic statistical information. Some weaknesses are more glaring than others; some gaps can be more easily filled in than others. A developmental program recognizing these differences and embracing a series of steps reconciling the urgency of requirements with the limitations of resources should be drawn up and initiated. It seems most likely that the techniques of random sampling and of contacting the transactors within a group who conduct a large proportion of the group's volume of transactions, will play some role in such a developmental programme. It is of the utmost importance that in such a programme, attention be given to ways of obtaining and processing data quickly with the ultimate object of preparing the financial accounts with no greater lag than is involved in preparing the quarterly income and expenditure accounts. This is imperative if the maximum usefulness of the accounts in current analysis and forecasting as a basis for policy decisions is to be achieved. We are naturally enthusiastic, but with our limited experience and that in some other countries in mind, we have no hesitation in offering gratuitously the forecast that some variation of the framework, concepts and content of the National Transactions Accounts will become as widely used in economic debate and decision-making as the income and expenditure accounts are today.

Some two or three years before taking up duties with the Royal Commission on Canada's Economic Prospects, this writer, in planning research on the capital market, yearned for a method of knitting together

the statistics on flows of funds and flows of goods in a common framework. On the financial side there was much information available but the classifications, definitions and breakdowns, not to mention the gaps, made integration appear a formidable task. Stimulated by the work on money flows in the United States by Morris A. Copeland, an exploration of the magnitude of the task was begun, but it was soon realized that the undertaking was too large for one or two researchers working outside the government service with severely limited assistance. When the opportunity came to carry the work out for the purposes of this study of *Financing of Economic Activity in Canada,* it was seized. The Commission was most fortunate in engaging the services of the three whose names appear as the authors of this part of the study. They, Lawrence M. Read, now of Carleton University, Ottawa; S.J. Handfield-Jones, of the Research Department of the Bank of Canada; and F.W. Emmerson of the Research and Development Division of the Dominion Bureau of Statistics, constituted the committee which worked out the concepts and worked up the data. The credit is theirs. They were assisted by Professor H. Scott Gordon of Carleton University, who, in the summer of 1955, studied problems of constructing accounts for non-financial corporations, and by Professor J.V. Poapst, now of the University of Toronto, who helped in several ways and particularly with the mortgage accounts, and accounts for investment companies and corporations. Willing and helpful co-operation from the staffs of the Bank of Canada, the Dominion Bureau of Statistics and the Central Mortgage and Housing Corporation is most gratefully acknowledged.

WM. C. HOOD.

A

INTRODUCTION

1. *The Nature and Functions of the National Transactions Accounts*

In the pages that follow, a system of National Transactions Accounts for Canada is presented and described. The object of this system is to record within a standardized system of classification all economic transactions taking place in the national economy. It incorporates those transactions which are recorded in the national income and expenditure accounts officially published on a current annual and quarterly basis[1], and presents in addition a record of financial transactions which are excluded there. It must be stated at once that this is a pioneering endeavour. Those who have been concerned with the preparation of this volume are impressed with the potential usefulness of such a wider framework of economic accounting, and hope that those parts of the National Transactions Accounts which are new can soon be prepared on the current quarterly basis and within the acceptable limits of accuracy which are essential for current analysis and policy making. But they would stress that the decisions which have been made on concepts, classifications and arrangements are only suggestions, requiring ratification or reversal in the forum of public discussion; and that many areas of unexplored country have been visited and mapped with all the inaccuracies, fanciful imagination and prejudice which can be found in the work of the early cartographers.

These accounts are built upon the concept of an economic transaction, and the nature and characteristics of this will now be discussed. Suppose there are two persons A and B, each in possession of different things which may be called x and y. In the beginning, A owns x and B owns y; but then an exchange takes place and A ends up with y and B with x. The transaction may be described completely in the following schema.

Since two persons and two things are involved, four accounts can be drawn up, one for A, one for B, one for x and one for y. Since an economic transaction must be defined as an exchange of equal values

1 See Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956.*

as established in the market place, all four of these accounts must balance; the gains must equal the losses both for A and for B, and also for x and y. This is no more nor less than the principle of double entry bookkeeping. But while two entries are necessary to record a transaction for any single individual of for any single thing, *four* entries are required to record a transaction completely for the economic system as a whole. The National Transactions Accounts are therefore a system of quadruple-entry bookkeeping, and from this most important characteristic the accounts obtain their great logical power for the development, control and reconciliation of information.

	A's Account		B's Account		Total	
	Taken in Exchange	Given in Exchange	Taken in Exchange	Given in Exchange	Taken in Exchange	Given in Exchange
Thing x	—	10	10	—	10	10
Thing y	10	—	—	10	10	10
Total	10	10	10	10	20	20

The types of transactions occurring in the modern economy are diverse. Barter, or the exchange of one commodity for another, was once common but is now confined to odd corners of the economy. For barter transactions to be recorded, one of the commodities must be entering into transactions in other types of markets so that it may be priced or its value expressed in the units employed in the accounting system. More common are the exchanges of goods, productive services or financial claims for money. Here money, which is itself a financial claim in the modern economy, is fulfilling its role as a medium of exchange. Such monetary transactions, however, are not to be thought of as the only ones of importance, for a great number of transactions take the form of an exchange of goods, services and financial claims for other types of financial claims. Such financial claims are normally of the short term type known as receivables or payables, examples being trade credit and consumer charge accounts. They are sometimes described as substitutes for money, and one of the important roles of money itself is clearing the net balance of such credit which builds up over a period of time between a pair of habitual transactors.

Quite frequently, several transactions take place simultaneously in a complex grouping. For example, a consumer may purchase a car, partly with cash and partly with his own instalment credit liability; such payment may cover not only the price of the car itself but also the tax upon it, a tankful of gas and some future repair services. The components can always be disentangled conceptually however into separate one-for-one transactions.

Transfer payments, such as taxes, family allowances, subsidies and gifts are very special kinds of transactions. The payer parts with money or goods as the case may be, but common sense decrees that no equivalent *quid pro quo* is gained; by definition, the transaction is a unilateral one. To take care of this difficulty which otherwise threatens to wreck the principle of quadruple entry, the payer is deemed to receive a transfer acknowledgment of equal value. This is an artificial accounting convention, and the question of whether the payer receives goodwill or a glow of conscience upon which he really places value is irrelevant.

Economic activity consists of a myriad of individual transactions and the task of social accounting is to organize them into a system of aggregates which are few enough in number to fall within the compass of human understanding but which are at the same time reasonably homogeneous. The National Transactions Accounts are thus a system of classification, of the things being exchanged into categories and the transactors into sectors. Within the national income and expenditure accounts, four broad sectors are distinguished; persons, business, government, and non-residents. The boundary lines between them are also recognized in the National Transactions Accounts, but further subdivision is undertaken — of business into six sectors and of government into three, making a total of eleven sectors in all. Some of the business sectors are further divided into sub-sectors. Things being exchanged are classified into five categories of current goods, services and transfer acknowledgments, two categories of investment goods, nine categories of financial transactions and a group of other and unclassified items. Again, some further division into sub-categories occurs, particularly in the financial area. These classifications are more fully described in the following section, and precisely specified in the technical sections on sources and methods.

Just as the individual's accounts for a single transaction will balance, so the sector accounts for all its transactions will balance; thus the sector accounts are analogous to complete statements of the sources and uses of funds. Such information is already available for broad sectors of the economy. Perhaps the most advanced example is to be found in the Balance of Payments, which includes both the transactions in goods and services entering the national income and expenditure accounts and the financial transactions appearing in the 'capital account'. The Direct Estimate of Personal Saving published in the Bank of Canada *Statistical Summary* attempts to provide a 'capital account' for the personal sector which can complement the personal income and expenditure statements and thus complete the 'double-entry' system. In addition, a great deal of information covering both non-financial and financial transactions is available for government, banks, life insurance companies and other corporations. All these various accounts however differ widely in their classification of 'things' and the task of the National Transactions Accounts is not so much the collection of comprehensive sector statements as their reclassifica-

tion into the standard set of categories. Once this has been done, it becomes feasible to compile accounts for each category which are comparable to the sector accounts and, like them, self-balancing. Here, too, there have been forerunners. Special reference should be made to the work done on mortgage lending by C.M.H.C.; and other examples are the classification of chartered bank loans and the distribution of Government of Canada securities. It is possible and convenient, of course, to present the sector and category material separately, but it is also possible to bring the two dimensions together and thus construct for any period of time a matrix in which all transactions can find a place. Such summary matrix tables for each of the years 1946-1954 are presented herein, and while they are complicated in appearance, they are in principle nothing more than the schema shown above for a single transaction, extended to include all sectors, not merely A and B, and all categories of 'things', not merely x and y.

Social or economic accounting is an ancient idea but one which has been successfully realized only in the recent past. The advances which have been made during the past 20 years, however, have possessed an importance and significance which it is very difficult to overestimate. The senior system comprises the national income and expenditure accounts which are oriented towards the measurement of the economy's aggregate performance, expressed alternatively in terms of production, income or expenditure; their arrangement also reflects an interest in the relationship of aggregate supply and demand and the development of econometric and other techniques of short run forecasting. More recently, the input-output or inter-industry relations studies have unravelled the flows of goods and services between industrial groupings of plants or establishments in order to illuminate the technological articulation of the productive machine and to analyze the consequences of changes in final demand upon the relative size of the various industries, and their requirements of labour and capital. The National Transactions Accounts are not concerned with technological relationships nor with establishment classifications; they are rather an extension of the income and expenditure accounts in two directions. On the one hand, the sector classification is more detailed; this extension has been foreshadowed by the steady shift in emphasis which has been occurring for some time within the income-expenditure framework from the aggregates to the sector analysis. On the other hand, the National Transactions Accounts record financial transactions as well as the flows of real goods and services; they reveal not only the amount of each sector's saving, its expenditure on investment goods and the excess of one over the other, but also the financial channels through which funds travel from those sectors which have a surplus and to those which have a deficit. It is in this area that new ground is broken. There was a period when interest in financial transactions, in the capital market, in monetary problems and the state of liquidity ran at a low ebb, but in recent years

this tide has once again been rising. The accounts presented here are one expression of this greater emphasis, and are oriented particularly towards the financial system and the relationship between non-financial and financial transactions.

The three social accounting structures, income-expenditure, input-output and N.T.A. are not rivals however. When the Dominion Bureau of Statistics undertook the compilation of the inter-industry relations study of 1949, a clear decision was made to employ as far as possible the same conceptual foundation as the income-expenditure accounts, so that it could be viewed as an extension and elaboration of certain selected portions of them. When the National Transactions Accounts were being considered, the same fundamental decision was made. Such a decision expresses the belief that a single unified system of social accounts is both possible and desirable. This structure will have many dimensions and cross-classifications, and the various alternative arrangements portraying different aspects of the edifice will differ in objective and orientation but not in concept. A fuller description of this unified system will be found in pages 117-122 of *National Accounts, Income and Expenditure, 1926-1956.*

In the same source will be found a description of the concepts common to both systems, and so only a brief summary of some of the points is required here — more detailed comment being made where necessary in the technical descriptions of the sector and category accounts. Many of the special treatments involve the definition of the business sector's activities. For example, unincorporated business and government enterprises are deemed to pay their owners all their net income earned in the current period; in other words, only private corporations are permitted to save anything in excess of depreciation and similar costs. A portion of these earnings is in fact reinvested in the business and appears as a specific type of financial transaction. All housing is treated as a business activity, the owner-occupier *qua* consumer renting his house from himself *qua* business man.

The treatment of life insurance and banking also has special features: life insurance policyholders are supposed to receive all the interest, dividends and net rents earned by the companies' assets, and to pay a fee to the companies for insurance and investment services provided, while banks are deemed to pay interest on deposits greater than they actually pay, and receive more service charges than they actually receive, these additional amounts being in effect offset or bartered in the real world. Other 'imputed' transactions include food and fuel produced and consumed on the farm, and shelter, food and clothing provided to employees as income in kind. Gold produced in Canada which is actually acquired by the Exchange Fund is included in exports of current goods and services (see notes on Category C1). Interest on consumer debt after deduction of administrative expenses, is treated as a transfer payment rather than as a payment for a

productive service. Finally, all purchases of goods by governments are treated as purchases on current account rather than capital account, even though the goods may take the form of buildings, roads, machines, vehicles or other types of durables which are treated as investment goods in the business sector. All of these conventions also hold in the National Transactions Accounts, except the last, which is reversed in order to place government expenditure on a basis comparable to business expenditure. For many analytical purposes, saving and investment totals which include government capital formation are more significant than totals which exclude them.

While the decision to maintain consistency with the income and expenditure accounts has seemed not only expedient but also an expression of Canadian statistical tradition, it does depart from the practice of those who first suggested this type of social accounts. Professor Morris Copeland was the pathbreaker in this field and all subsequent workers are in his debt. *A Study of Moneyflows in the United States* concerned itself however only with those transactions of which one side was money or its closest substitutes, and thus with the work that money actually performs. This of course is not the same as the scope of economic activity, and a broader system of accrual rather than cash accounting was adopted by the Board of Governors of the Federal Reserve System when they extended Copeland's work and published the volume *Flow of Funds in the United States 1939-1953,* and subsequent extensions and revisions. This most valuable study continues to exclude barter and most imputed transactions as occurring outside the normal markets. The most notable of the differences which result in the U.S. and Canadian versions is the treatment of owner-occupied housing, where the National Transactions Accounts are perhaps unreal and cumbersome; but the price is to be found in the extremely complex reconciliation statements set forth in the F.R.B. publication to convert the flow of funds accounts to the Department of Commerce's national accounts basis and vice versa. Perhaps the departure of the National Transactions Accounts from the Flow of Funds is more important in principle than in practice. "It is interesting to note that Copeland now chides the F.R.B. with overdrawing the conceptual divergence between the money flows and the G.N.P. systems. 'I have elsewhere overdrawn it myself', he says. 'Probably I have been a much more grievous sinner in this respect . . . but the conviction has been growing on me that conceptually the two can be made one.' In a paper presented before the Conference on Research in Income and Wealth in October 1954 entitled *The Feasibility of a Standard Comprehensive System of Social Accounts,* Copeland attempts to give practical form to this conviction expressed two years earlier. He proposes as an accounting principle 'a kind of modernized Occam's razor — dispense with any concept and any distinction the general analytical usefulness of which cannot be clearly shown'. The result for what he continues to call money flows accounts is, in effect, an accommoda-

tion to the accrual and other accounting conventions of present national income and expenditure accounts."[2]

What are the functions and uses of the National Transactions Accounts? What purposes can they serve to justify the effort of compiling them? The same questions can be put to other forms of the social accounting framework, and they have been answered very well in *National Accounts, Income and Expenditure, 1926-1956*. There it is stated that the National Accounts are useful to governments in the consideration of economic policy, to business in appraising the course of events, to teachers in explaining the structure of the economic system, and to statisticians in enforcing consistency and determining the priorities of statistical development. To such an extent has the national income approach become a part of the intellectual apparatus of these and other users that the value of these functions is beyond dispute. The National Transactions Accounts are still untested, so their value is more speculative and the first function they can perform is undoubtedly the statistical one. What data are available are heterogeneous and difficult to assess, and some areas for which data are not available are of considerable importance; the systematic appraisal of sources, the provision of a standard classification of sectors and categories and the delineation of the gaps in the statistical fabric are duties which the National Transactions Accounts are already performing. As they evolve, they will become capable of serving more immediately useful purposes, which may be expected to cluster around the relationships between non-financial and financial transactions. How will the investment programmes of various groups of transactors be financed, and what will be their impact on the capital market? How do sectors vary in their dependence upon external as opposed to internal financing, long versus short-term borrowing, marketable as opposed to non-marketable instruments? How flexible are the financial intermediaries, and if they have to provide relatively larger flows of funds to one set of borrowers how will the others who receive relatively less be affected? Such questions as these will receive more complete and illuminating answers, not only when the basic information is more complete, but also when it is systematically organized to provide a consistent and a comprehensive view of the non-financial and financial interrelationships of the economy.

2. *The System of Classification*

The structure of accounts which follows includes a set of matrix tables each of which summarizes all transactions occurring during a given year, and a series of sector accounts and a series of category accounts which record for each, in time series form and in varying degrees of detail, the transactions which have taken place during the whole period 1946-54. The matrix provides an all embracing picture for one period of time and it can give a sense of perspective and of proportion and some guidance to

2 The quotation is from L. M. Read, "Development of National Transactions Accounts", *Canadian Journal of Economics and Political Science*, February 1957.

the sector and category accounts; these accounts on the other hand are at once simpler and more detailed and provide a useful framework for intensive analysis. Extended notes on the coverage, sources, and methods of estimation accompany these sector and category statements.

For the purposes of these accounts, 11 principal sectors are distinguished and some of these in turn are subdivided into subsectors in the detailed tables; in the matrix the 11 sectors form the vertical columns of the grid. The first three, Consumers, Unincorporated Business and Non-Financial Corporations, comprise the general non-financial public, and present the greatest statistical obstacles. The Consumer Sector contains not only individuals in their non-business roles but also non-profit institutions, private pension funds and various trustee or agency accounts; the transactions of this sector are derived largely as residuals of the various category accounts. Unincorporated Business, including all non-government and non-corporate housing activities, even when owner-occupied, is a sector for which is recorded not all the transactions of unincorporated business but only those which can be specifically identified as business transactions rather than consumer activities. In particular, the cash and other liquid assets of individuals are allocated exclusively to individuals in their consumer rather than their business roles. An apparent curiosity is the distribution of mortgage transactions between Sectors I and II; because housing transactions are considered to be business transactions, mortgage borrowing is attributed to Sector II, but to the extent that individuals are mortgage lenders, the debit entries are in Sector I.

Sector III contains all corporations other than government enterprises and financial companies; some financial enterprises in fact remain here, such as investment dealers, real estate agents and holding companies. Sector IV brings in the Government Enterprises, subdivided into federal and provincial-municipal in the detailed tables. Three financial sectors follow: Banking, which includes the Bank of Canada, the Exchange Fund and the Chartered Banks in Canada;[3] Life Insurance; and Other Financial Institutions. This last is the sum of thirteen subsectors, each of which is given separate treatment in the detail of the sector accounts. Sectors VIII, IX and X are the three levels of government — Federal, Provincial and Municipal, and Sector XI is the Rest of the World. It will be seen that the sector analysis is taken further in these accounts than in the National Income and Expenditure Accounts now published, particularly in respect to the business sector which appears in these accounts as Sectors II-VII inclusive. However, the full detail cannot be developed in the current income and expenditure accounts, as may be seen in the matrix tables.

The rows of the matrix are composed of the standard categories into which all transactions are classified for all sectors. These categories are

[3] The Banking Sector is one of the least satisfactory aggregates, and the inclusion of the Exchange Fund is particularly disadvantageous from many points of view. For most analytical purposes, the subsector accounts for the Bank of Canada, the Exchange Fund and the Chartered Banks require separate examination.

grouped into four different sets of accounts which serve as major divisions of the matrix. The A Account or Current Transactions Account includes all transactions in current goods, services and transfer acknowledgments: Labour Service, the payment for which is wages, salaries and supplementary labour income; Capital Service, the payment for which is interest, dividends and net rents; Proprietors' Service, the payment for which is the income from unincorporated business including farms; Transfer Acknowledgments of all kinds including taxes, except migrants' funds appearing in Category C9; and Goods and Services n.e.i. (net) consisting wholly in these tabulations of net purchases or sales except in the case of Sector XI where both exports and imports are shown. The balancing item of this account is Gross Saving entered as a debit in the A Account. The Current Transactions Account is constructed in accordance with the overriding principle of harmony with the National Accounts as they are now published. A subsequent section demonstrates this in more detail by showing on the one hand how each of the matrix entries can be derived from the national income and expenditure accounts and how on the other hand the G.N.P. and its principal components can be drawn from the tables presented here. There is a difference in arrangement; but this version of the sector analysis is a useful variant in its own right.

The B Account, or Investment Transactions Account opens with gross saving carried down from the A Account and now shown as a credit entry. Changes in inventories and in gross fixed capital formation are entered in the debit columns, and the Account is balanced by the debit entry 'Saving minus Investment', which will be carried in its turn to the Financial Transactions Account. These two carrying balances, gross saving and saving minus investment are not in themselves transactions categories but they have two special functions. On the one hand, they link the three accounts together and enable each of them to be balanced in isolation; on the other they have analytical value and interest which justify their inclusion. Gross Saving can be subdivided into capital consumption allowances and miscellaneous valuation adjustments, other saving and the residual error of the National Accounts. The first of these represents principally the provision which business makes out of its earnings for the wear and tear and obsolescence of physical assets; while it is not a transaction between two parties but rather an internal bookkeeping arrangement, the significance attached to it is considerable and the case for recording it appears to be a strong one. 'Other Saving' includes personal saving, retained earnings of corporations, the adjustment on grain transactions and the current account deficit on transactions with non-residents; for the Government sectors, it includes both the surplus on the National Accounts basis and the amounts of government expenditure on inventories and fixed capital which are shown here as capital rather than current expenditures. The reason for including the Residual Error of the National Accounts here in Sector III is as follows. Total gross saving for all sectors in the National Transac-

tions Accounts is estimated by deducting expenditures from income, in order to make the A Account balance. The same procedure is followed in the national income and expenditure accounts, except in the case of the business sector where a direct estimate of corporate retained earnings is made with the help of *Taxation Statistics* prepared by the Department of National Revenue and direct survey of a large sample of corporations. The residual error, which is divided in half and included in both sides of the accounts, is the difference between this direct estimate of corporate retained earnings and the balance of the business sector's receipts and disbursements. In the National Transactions Accounts, it is recorded separately, and other saving appears then as the direct estimate, which is of course much more likely to be accurate. From this one cannot infer of course that the National Accounts are only subject to error within the business account; to the extent that errors appear there, offsetting errors must appear in the accounts of other sectors where the same income and expenditure transactions are recorded from the reverse point of view. But since equally reliable direct estimates are not available for the gross savings of other sectors, such errors cannot be allocated.

The investment transactions themselves include Change in Inventories, and New Fixed Capital Formation, divided between Residential and Non-Residential. In accordance with the national income and expenditure accounts, inventories are measured on the basis of the value of the physical change, an inventory valuation adjustment being made both to inventories and to earnings. Fixed capital formation includes the acquisition of new fixed assets by the Government Sectors. Purchases and sales of existing physical assets — those which have been produced in a previous period and included in that period's new capital formation — should also be recorded in the B Account, but unfortunately it has proved impossible to make any sort of comprehensive measurement of this category of transactions, and therefore they have to remain implicitly or explicitly in the D Account.

The last point to be noted before considering the C Account is this. While there is a general rule that the categories must be balancing in the sense that total debits and total credits in the category must be equal, B2 and B3 are exceptions to it. All entries in these categories are debits, and the corresponding credit entries are found in the category A5, Goods and Services n.e.i., which is out of balance by an equal and opposite amount. The *rationale* for this is that in fact the two parties involved in the purchase of a capital good look upon the transaction in different lights; for the buyer it is an acquisition of a capital asset, but for the seller it is a current sale, indistinguishable from any other sale in this regard.

The B Account is balanced by the entry Saving minus Investment which is carried down into the Financial Transactions Account. For the economy as a whole, Saving minus Investment is zero, but for any sector

it may be positive or negative and as such is a measure of the resources which can be made available to other sectors or must be obtained from them. The Financial Transactions Account records the actual financial channels through which these net intersector exchanges are consummated. This section of the matrix will have particular interest, since it is the most novel. The categories, which are arranged in some approximate order of liquidity, are as follows:

C1. Currency and Deposits

(a) Gold: Monetary gold held by the Exchange Fund and treated as a liability of the rest of the world.

(b) Currency and Bank Deposits: Includes coin, bank notes and deposits (in both Canadian and foreign currencies) at the Bank of Canada, Chartered Banks in Canada, and banks outside Canada.

(c) Other Institutional Deposits - These are the deposits and related non-marketable liabilities of other financial institutions, including the Quebec Savings Banks, Credit Unions, Post Office Savings Bank, Trust and Loan Companies.

C2. Charge Accounts and Instalment Credit

(a) Consumer Charge Accounts - This category includes only the consumer portion of retail charge accounts.

(b) Instalment Credit - This includes all the financing of durable goods, consumer and non-consumer, by retail dealers and instalment finance companies under conditional sales agreements.

C3. Loans

Chartered Bank Loans and Other Loans are distinguished: among the larger components of other loans are loans to individuals by credit unions, small loan companies and licensed money lenders, and loans made by the Government of Canada to other governments.

C4. Claims on Associated Enterprises

Recorded in these categories are transactions at less than arm's length:

(a) 'Non-corporate' records the increase in the equity of individuals in their unincorporated business operations.

(b) 'Corporate' includes the transactions by which one company acquires or finances a subsidiary, regardless of whether such finance is labelled stock or bonds or loans.

(c) 'Government' differs from 'Corporate' only in that the parties concerned are governments and government enterprises.

C5. Mortgages

Loans secured by mortgages.

C6. Bonds

Herein are included all notes, debentures and other such instruments regardless of term; Government Treasury Bills and short-term commercial paper are included as well as longer-term issues. Canada Savings Bonds and Refundable Tax are included in the Government of Canada debt. Four separate categories are distinguished, bonds issued or guaranteed by the Government of Canada, Provincial governments, Municipal governments and Others, which include other Canadian and all non-resident issues.

C7. Stocks

Common and preferred shares are included here, unless classified as claims on associated enterprises. On the debit side, it has proved impossible to distinguish between C6 (b), (c), (d) and C7 for Sectors I and III.

C8. Insurance and Pensions

This category is designed to include that part of individuals' contractual saving which takes the form of equity in insurance and pension contracts. Unfortunately the coverage is poor, being virtually limited to savings through life insurance companies, fraternal benefit societies and government annuities. The most significant exclusion is the flow into trusteed pension funds; these funds are so poorly documented in the available statistics that they have had to remain consolidated with the rest of the Consumer Sector rather than treated as financial intermediaries.

C9. Foreign Inheritances and Migrants' Funds

A place is found here for these inflows and outflows which are not considered to be regular remittances out of current income. They are not treated as current transactions in the National Accounts, and are therefore included as capital transfers in the C Account.

The end of the Financial Transactions Account is now reached, and the final section is simply referred to as 'Other Transactions and Errors'. The entries here serve to bring each sector into balance. Furthermore, since each category in the A, B and C Accounts has been so designed that total debits equal total credits (with the proviso that categories are taken in pairs where necessary), this final row in the matrix must also be in balance. 'Other Transactions and Errors' is then the unexplored margin of the accounts; one process by which the accounts may be improved in the future is the crystallization of new category accounts from this residue. Some progress has already been made in this direction, and within the sector accounts some additional transactions are specified. For some sectors, a reasonable estimate can be made of the transfers of existing real assets, although nothing like a complete account of these transactions can

yet be attempted. A group of balancing debit and credit items are shown under the heading of Special Deposit and Trust Accounts, but the group is relatively small and insignificant, and cannot pretend to cover the field. In addition, where receivables and payables have been recorded, such information is preserved in the sector accounts; and some identified transactions have been entered as unclassified. But there remains a pure residual which is always entered with an appropriate sign in the credit column as the balancing item for the sector. This is not only an error term, but also a container for all unidentified and unrecorded transactions, which in some sectors are very large.

In important ways, the ideal form of the National Transactions Accounts has been compromised in this initial presentation by the limitations of the data available at the present time, and this is particularly true in the treatment of the residuals. It may well be asked why residuals or balancing entries appear in the columns of the matrix, but not in the rows, an apparent flaw in the symmetry of the system. A residual can only emerge, however, when independent estimates can be made for all components; within the sectors this condition is fulfilled, but within the categories it is not fulfilled, the estimates for Sectors I and II, and/or Sector III being obtained residually from the category accounts rather than from any independent source. Should such an independent source of data on the transactions of individuals be developed in the future, then a residual column which might be called Sector XII will be necessary in order to balance the matrix.

It will then be possible to treat the residual error of the National Accounts in a much more satisfactory way. In the present arrangement, it will be recalled, the residual error is included in the gross saving of Sector III, which thus appears as the difference between the current receipts and expenditures of that sector rather than as the direct measurement of depreciation and retained earnings. A more appropriate treatment would be to enter the latter estimate in Sector III, and the residual error in Sector XII. In order to produce these results for gross saving within a consistent A Account, it would be necessary to make the corresponding adjustments in both Sector III and Sector XII in one or more of the receipt and expenditure categories, the most appropriate one perhaps being 'Goods and Services n.e.i.'.

The third major change in the form of the accounts would be a more precise segregation of non-financial and financial transactions. The practical difficulty here is the difficulty of constructing reasonably comprehensive category accounts for the transfers of existing assets and receivables and payables. Could this be overcome, the existing asset category and the sector residuals would be moved up into the B Account, the final balance of which might be called 'financial saving'. This in turn would be transferred to the financial transactions account representing the excess

of financial debits over financial credits. Receivables and payables would move up to a new position as part of a broader C2 category, and the last item in the financial transactions account would be called unclassified financial transactions. The D Account would then disappear. The superiority of this arrangement would lie in its more complete separation of non-financial and financial transactions, and the position of the sector residuals on the meeting ground of the two would symbolize this, and permit financial saving to be presented explicitly.

It will be observed that the illustrative terms 'taken and given in exchange' used earlier have been replaced by the more neutral and less ambiguous terms 'debits' and 'credits' as titles for the two sides of the sector accounts. Commonly the terms 'uses' and 'sources' of funds have been employed in this type of accounting system, but the more neutral terms debit and credit seem preferable. Accounts of this type do not conform strictly to the statements of uses and sources of funds employed in business accounting, and somewhat different conventions govern them.

In the current transactions accounts, debit entries record the goods and services acquired by the sector and thus correspond to expenditures, while the credit entries record the goods and services made available to other sectors and thus correspond to receipts. For example, the credit entry for consumers in the labour service category represents the sale of labour service by consumers while the much smaller debit entry is the purchase of labour service directly by consumers. These amounts are normally called 'wages, salaries and supplementary labour income' but this terminology is unsuitable here because it focuses attention upon that other side of the transaction which is normally a money payment and as such will appear under the category 'currency and deposits' in the financial account.

Gross saving always appears as a debit in the A Account and a credit in the B Account, and saving minus investment as a debit in the B Account and a credit in the C Account. All other B and C Account entries are made in accordance with the principle that changes in assets are debits and changes in liabilities are credits. Thus both gains and losses of an asset item are posted as debits and the entry may have a plus or a minus sign. For example, a corporation may raise money either by the issue of its own securities or by the sale of another corporation's securities which it owns; in the first case, the cash debit would be matched by a credit in the bond or stock category, while in the second the contra entry would be a minus debit in the bond or stock category. Any distinction between sources and uses of funds which blurs the distinction between assets and liabilities would seem to obscure information of considerable significance; the two transactions distinguished above have a very different character.

Quite apart from this *a priori* consideration, a very practical reason supports this procedure. In many cases, all that is known is the amount by which an asset or liability item changes during the period, the gross flows of borrowing and repaying, issuing and retiring, buying and selling being unrecorded. On the other hand, assets are almost always distinguished from liabilities in the source material and all this information can be recorded when this convention is adopted. Some difficulties must be admitted; liability reserves are sometimes deducted from the asset item to which they correspond, and a transactor sometimes records the purchase of its own bond liabilities as investments, increasing assets, and sometimes as retirements, decreasing liabilities; but the first of these is a problem for *any* classification, and the second introduces some variability which is probably significant in itself.

If complete information were available, the present arrangement could easily accommodate gross flows rather than net, merely by allowing two lines for each of the categories affected, one for the plus and one for the minus component of each debit and credit entry. Such gross flows would be interesting for many purposes — such as the analysis of contractual saving, to cite one example — but the information now available is only partial and has not been incorporated in the accounts.

While plus and minus items are netted against each other within the debits and within the credits, debits and credits are not in principle netted against each other. Some exceptions cannot be avoided, particularly in the current account category 'Goods and Services, n.e.i.', where only net debits or net credits are shown for all sectors except Sector XI. Because debits and credits are kept distinct as a general principle, the sectors are normally on a combined rather than consolidated basis.

One comment might be added on the question of balance sheet material; if indeed much of the information has been derived from balance sheets, would it not be useful to compile a National Balance Sheet as well as National Transactions Accounts? Clearly this would be most useful and the two would complement each other in analysis. Due however to the problem of valuation and the difficulties of measuring the stock of physical capital, a National Balance Sheet is more difficult to construct than the National Transactions Accounts, not less, and time has not permitted any attempt at such a compilation even for a single moment of time.

3. *A General Description of Sources and Methods*

How are these accounts actually constructed? What steps are taken, what statistical procedures used in making these estimates? Detailed descriptions of sources and methods are to be found in the technical notes

which accompany the sector and category accounts; a broader answer to these questions at this point, however, may give a greater sense of reality to the system, and will serve to introduce some discussion of the quality of the estimates and of certain overriding technical questions such as the problem of valuation, and the timing of transactions.

a) *The Current Transactions Accounts*

Since this portion of the National Transactions Accounts is wholly based on the national income and expenditure accounts, it suffices to describe the way in which the figures were rearranged and refer to the description of sources and methods which may be found in *National Accounts, Income and Expenditure, 1926-1956.*

The exact relationships between the national income and expenditure accounts and the National Transactions Accounts are specified in the following tables. The first shows the derivation of the Current Transactions Account from the Sector Analysis, the detailed composition of each item and the code references of the National Accounts being specified and the 1954 estimates entered as illustrations.

Two additional steps are required: the breakdown of the Government sector into Federal, Provincial and Municipal by means of the supplementary information provided in Tables 36-46 of the National Accounts publication, care being taken to include on both sides of the account the amount of inter-government transfers (amounting in total to $704 million in 1954) which are eliminated by consolidation in the Government sector table; and the inclusion of gross capital formation by government in capital rather than current expenditures. Figures of gross fixed capital formation are given in Tables 43 and 54 of *National Accounts, Income and Expenditure, 1926-1956*[4], the changes in inventories are not published there and are estimated as described in the sector and category notes. The total is deducted from the debit side of A-5 'Net Goods and Services n.e.i.' and added to Gross Saving. This deduction is not strictly correct, it should be noted, insofar as the new capital assets of Government are not acquired by purchase from the business sector but created by the Government's own employees.[5]

The remaining tables perform the reverse operation, and demonstrate how the summary G.N.P. and G.N.E. accounts may be derived from the National Transactions Accounts format. It will be seen that the complete G.N.E. table can be constructed from the material in the A and B Accounts, but further information is required for the calculation of the main com-

4 For the years 1946-48, the breakdown by level of government was obtained from *Private and Public Investment in Canada.*

5 This point is discussed in more detail in paragraph 166, page 132 of *National Accounts, Income and Expenditure, 1926-1956.*

ponents of the G.N.P. The following items are required and may be found in *National Accounts, Income and Expenditure, 1926-1956.*

	National Accounts Reference	1954 Value ($ millions)	
Indirect taxes	15	3,033	
Less Subsidies	21	- 86	
			2,947
Inventory Valuation Adjustment ..	50		86
Adjustment on grain transactions ..	49(c)		8

In the National Transaction Accounts, Indirect Taxes less subsidies are included in A4, 'Transfers including Taxes' and the remaining items are included in A6, 'Gross Saving'.

b) *The Investment and Financial Transactions Accounts*

(1) Since most of the source material is arranged by transactors rather than by categories of transactions, it is natural to make one's approach through the sector rather than the category accounts. The first step is therefore the collection of balance sheets for all possible sectors and subsectors, these being in diverse forms and terminologies. No such source material is available for Sector I and II, but for Sector III estimates may be drawn from *Taxation Statistics.* For the enterprises in Sector IV, balance sheets are published in Annual Reports and elsewhere. One turns to the Bank of Canada *Statistical Summary* for much of the information required for Sector V, and the *Reports of the Superintendent of Insurance* for Sector VI. Much diverse source material is necessary for the many subsectors of Sector VII, not all of which is published. For Sectors VIII and IX the *Public Accounts* are the prime sources, and for Sector X the D.B.S. Publications, *Financial Statistics of Municipal Governments.* Sector XI rests squarely on the Balance of Payments; see D.B.S., *The Canadian Balance of International Payments and International Investment Position.*

(2) These various accounting statements are next recast into the form of the standard category classification and emerge as standard balance sheets. It is at this point that the National Transactions Accounts as such begin to emerge, and the process of classification is fundamental to the whole system. Inevitably borderline cases emerge requiring subjective judgment, but in most cases these are not likely to make any substantial difference to the results.

(3) First differences are next calculated over the period for which the amounts are being computed in order to obtain the changes in assets and liabilities.

CALCULATION OF THE CURRENT TRANSACTIONS ACCOUNTS, 1954

(millions of dollars)

Category	National Accounts Reference		Consumers		Business		Government		Rest of the World		Total	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
A-1 LABOUR SERVICE			433	12,799	10,454		1,912				12,799	12,799
Wages, Salaries, etc. received by persons												
From Business	28a	1a		10,454	10,454						10,454	10,454
From Government	19bi	1b		1,545			1,545				1,545	1,545
From Government: Military Pay and Allowances	19bii	2		367			367				433	433
From Persons	8b	1c	433	433							367	367
A-2 CAPITAL SERVICE				1,719	2,013		669	687	147	423	2,829	2,829
Interest, dividends and net rental income of persons	—	5		1,719								1,719
Investment income of government:												
Interest	—	16a						237				237
Profits of Government enterprises		16b						450				450
Interest on the Public debt	20a						669				669	
Interest and dividends received by non-residents:												
From Business	—	33a								354		354
From Government	—	35b								69		69
Interest and dividends received from non-residents:												
By Corporations	38a	—							61		61	
By Others	39	—							86		86	
Net investment income paid by business:												
Investment income	28b	—			3,750						3,750	
Less: Charitable Contributions	6b	—			—26						—26	
Income tax collections	13a	—			—1,176						—1,176	
Excess of liabilities over collections	13b	—			94						94	
Withholding taxes	14	—			—58						—58	
Undistributed profits	49a	—			—571						—571	
A-3 PROPRIETOR SERVICE				2,665	2,665						2,665	2,665
Net income of farm operators	28c	3		1,009	1,009						1,009	1,009
Net income of non-farm unincorporated business	28e	4		1,656	1,656						1,656	1,656

A-4 TRANSFERS INCLUDING TAXES..			1,859	1,660	4,113		1,634	5,946			7,606	7,606
(a) Direct Taxes:												
Persons......................	8	12a	1,437					1,437			1,437	1,437
Corporations (i) Collections.....	44c	13a			1,176			1,176			1,176	1,176
(ii) Excess of liabilities over collections......	44d	13b			—94			—94			—94	—94
Withholding tax...............	44e	14			58			58			58	58
(b) Indirect Taxes:												
Indirect taxes...............	29a	15			3,033			3,033			3,033	3,033
Less: subsidies..............	29b	21			—86			—86			—86	—86
(c) Transfers from government......	20b	6a		1,634			1,634				1,634	1,634
(d) Gifts........................	44b	6b		26	26						26	26
(e) Social insurance and government pension funds.................	1d	16	422					422			422	422
A-5 NET GOODS AND SERVICES N.E.I.			15,742			22,789	2,549		5,000	5,151	23,291	27,940
Purchases by Consumers:												
From business..................	9a	24a	15,266			15,266					15,266	15,266
Tourist and travel expenditure.....	9c	34a	389							389	389	389
Other expenditure abroad.........	9d	34b	87							87	87	87
Government purchases from business.	19a	24b				2,549	2,549				2,549	2,549
Non-Resident purchases from business	38 (b+c)	25				5,000			5,000		5,000	5,000
Less: Sales to business...........	30	33b				—4,675				4,675		—
Business sales on capital account:												
Gross fixed capital formation......		24c				4,779						4,779
Value of physical change in inventories......................		24d				—130						—130
A-6 GROSS SAVINGS.................			809		3,544		—131		427		4,649	—
(a) Depreciation and similar business costs........................	49b	—			2,905						2,905	
(b) Other Savings:												
Persons....................	48	—	809								809	
Business: Undistributed Corporation Profits......	49a	—			571						571	
Adjustment on grain transactions.......	49c	—			8						8	
Inventory valuation adjustment........	50	—			86						86	
Government................	51	—					—131				—131	
Rest of the World...........	56	—							427		427	
(c) Residual error................	52,57	—			—26						—26	
TOTAL........................			18,843	18,843	22,789	22,789	6,633	6,633	5,574	5,574	53,839	53,839

SOURCE: D.B.S. *National Accounts, Income and Expenditure, 1926-1956.*

GROSS NATIONAL EXPENDITURE

	Sector	Category	1954 Value	
			($ millions)	
Personal Expenditure on Consumer Goods and Services				
Direct Labour Service	I	A1 Dr.	433	
Net goods and services n.e.i.	I	A5	15,742	
				16,175
Government Expenditure on Goods and Services				
Direct Labour Service	VIII-X	A1	1,912	
Net Goods and Services n.e.i.: Current	VIII-X	A5	1,610	
Addition to Inventories	VIII-X	B2	—3	
New Fixed Capital	VIII-X	B3	942	
				4,461
Gross Domestic Investment				
Additions to Inventories (business only)	II-VII	B2	—130	
New Fixed Capital (business only)	II-VII	B3	4,779	
				4,649
Exports — Imports (=minus rest of world saving)	XI	B1 (b)		—427
Residual error (one-half)	II-VII	B1 (c)		13
G.N.E. AT MARKET PRICES				24,871

NATIONAL INCOME AND GROSS NATIONAL PRODUCT

	Sector	Category	1954 Value	
			($ millions)	
Wages, Salaries and Supplementary labour income Military Pay and Allowances	Total	A1		12,799
Investment Income:				
Capital service payments by business	II-VII	A2	2,013	
Transfers and Taxes paid by Business	II-VII	A4	4,113	
Minus: Indirect Taxes less Subsidies	a		—2,947	
Retained Earnings	II-VII	B1 (b)	571	
Interest and dividends received from abroad	XI	A2 Dr.	147	
Less: Interest and dividends paid abroad	XI	A2 Cr.	—423	
TOTAL Investment Income				3,474
Net Income of Unincorporated Business	II-VII	A3	2,665	
Plus: Adjustment on Grain Transactions	a		+ 8	
				2,673
Inventory Valuation Adjustment	a			86
Net National Income at Factor Cost	a			19,032
Indirect Taxes less Subsidies				2,947
Depreciation Allowances and Similar Business Costs	II-VII	B1 (a)		2,905
Residual error (one half)	II-VII	B1 (c)		—13
G.N.P. AT MARKET PRICES				24,871

a Not shown separately in the National Transactions Accounts.

(4) These changes are then adjusted where necessary for valuation and timing in order to obtain the transactions accounts. (See (8) and (9) below). These transactions accounts are derived separately for the subsectors and subsequently combined into the sector accounts. In the case of the Rest of the World, it may be noted, the transactions account emerges directly from the classification of the Balance of Payments statements which are in effect flow accounts.

(5) From the subsector or sector transactions accounts, each item is posted to its corresponding category account. When this has been done, additional data relating to the category may be introduced from other statistical sources. For example, detail on depreciation and inventories was obtained from the National Accounts; on fixed capital investment from *Private and Public Investment in Canada,* published by the Department of Trade and Commerce; and on currency and bank deposits, from the Bank of Canada *Statistical Summary.* The charge account and instalment credit categories depend heavily on the Consumer Credit table in the *Statistical Summary,* and on D.B.S. *Retail Consumer Credit* and *Sales Financing.* The Quarterly Classification of Bank Loans in the *Statistical Summary* and detail given in the *Public Accounts* are most helpful in completing the loan categories; and a great deal of help in connection with mortgages has been provided by members of the Economic Research Division of Central Mortgage and Housing Corporation. In the field of bonds and stocks, the tabulations of new issues and retirements published in the *Statistical Summary* have been used.

(6) It came as no surprise to discover that the information obtained from the sector sources did not always agree well with such category information or with other sector data in those cases where overlapping did occur and independent estimates of the same body of transactions were available. A process of reconciliation became necessary. It is at this point that the N.T.A. approach can make a useful statistical contribution, and it is regretted that time was not available for even further work in this direction. In effect, a decision had to be made in favour of one or other of the sources, and in most cases the original sector estimate was changed. Such a change of course affected the sector balance, unless offset by an equal and opposite change elsewhere. The necessary *contra* entries were frequently made in the residual category, but in other cases, some other item such as saving or transactions in existing assets required modification.

(7) This work within the category accounts comes to a climax in the calculation of the accounts for Sectors I and II, the consumption and business activities of persons, for which no independent source of information is available. As noted earlier, they are in a sense the residual sectors, and their transactions are estimated from the records of the other parties to them. In some categories, of course, persons are not involved at all, examples being Cl(a), C4(b) and C4(c). In others, the personal transactions

are clearly identifiable — as in the case of consumer charge accounts, insurance and pensions and inheritances and migrants' funds. Where the transactions in a category are less specialized and more diffused, however, the methods of estimation are less satisfactory. One method, which is applied to currency and deposits, bonds and stocks and mortgages, deducts from the total credits in the category the observed debits in all other sectors and ascribes anything remaining to the Consumer Sector — thus including there all the errors of estimation in the other accounts. Even this cannot be used where the transactions of Sector III are not known; and so in the case of inventories and fixed capital formation, other institutional deposits and bank loans, some balance has to be distributed between Sectors I and II on the one hand and Sector III on the other by the application of fixed percentages, preferably within as fine an industrial classification as possible. This last technique is particularly unsatisfactory; in fixed capital formation the chances of error are limited by the impossibility of negative transactions, but in the financial field even this limitation is absent, and furthermore that very shift in proportion which is necessarily excluded from the measurement may be the most important event occurring. Wherever possible, the use of fixed proportions has been avoided; in one instance where it could not be avoided, the bank loan category, some evidence suggests that the results are acceptable.

(8) *The Problem of Valuation*

The National Transactions Accounts purport to record transactions at the transactions price; when something is purchased, its relevant value is the purchase price, and when sold, its sale price. But much of the source material comes in the form of balance sheets from which the pure transaction can only be measured with difficulty. Changes in balance sheet items will reflect not only purchases at purchase price and sales at sale price, but also capital gains and losses and writeups and writedowns. For example, a security may be purchased for $90 and the security account increased by that amount; so far, so good. But should it be sold for $95, the security account will only decrease by $90, and the remaining $5 will appear in the profit and loss or surplus account. In order to record the sale correctly, the capital gain has to be added to the change in the balance sheet; or, to put it more generally, net purchases equal the increase in the balance sheet plus writedowns and capital losses minus writeups and capital gains.

The principle is simple enough, but in practice its application becomes complicated and involves the general problem of the treatment of reserves. In business accounting, the normal way to provide for the possibility of a loss of value is to establish a reserve, one of the main purposes of which is to smooth out the impact of loss on the flow of income; the reserve being in effect a reservoir drained by the actual incidence of loss and replenished by transfers from the operating or the profit and

loss account. If these reserves always appeared explicitly on the balance sheet, and the inflows and outflows were recorded, the treatment of them would not be difficult. They could be treated as part of the surplus, for transfers to them are classified as elements of gross saving. The change in the reserve will differ from such transfers however by the amount of the loss charged against it, and data on these losses will be used in calculating the transactions in the assets where the loss was incurred.[6]

In other cases, however, the reserve is not shown explicitly but deducted from the asset it is designed to protect; the asset then appears net of reserve, and transfers to the reserve appear as writedowns. In these cases, it is desirable to reverse the deduction, and proceed as before, but the data are frequently quite inadequate. One of the most serious instances of this problem is encountered in the so-called 'hidden reserves' maintained by the chartered banks, and some other financial institutions. Sometimes the amount of the transfer is known, but not its distribution over various asset types; sometimes only the net increase in the reserve; and it is even possible that such reserves exist where they are not suspected.

One special case is depreciation. Commonly, the amount of fixed capital is shown net, and sometimes the amount of the annual depreciation charge is not known. The amount of this charge has been estimated in several instances on the basis of 5 percent of the capital, this being the amount allowed on structures by the tax regulations. The amount of depreciation is shown as a separate component of gross saving, and it would be possible to show separately transfers to other types of reserves, reducing 'other saving' closer to the increment in surplus, if such a separation is thought sufficiently useful and significant.

Other special cases of valuation adjustments are premiums and discounts on security issues, being the difference between the par value commonly shown on the balance sheet and the issue price. For the purposes of these accounts, par has no significance, and so premiums less discount are added back to the par value of the issue. Discounts sometimes are bracketed with dealers' commissions which should not be treated in this way. Such commissions, and indeed the fees of all those who assist in the transfers of assets, create very difficult problems, for they are a gap between the buyer's purchase price and the seller's sale price unless otherwise specified.

Some of the very largest valuation adjustments have to be made because of changes in the foreign exchange value of the Canadian dollar. Conventionally, foreign currency assets and liabilities are converted into Canadian dollar equivalents at the current rate and this involves revalua-

6 Except in those cases where the loss is treated as a transfer payment by the National Accounts.

tions of great magnitude.[7] In the discussion of the Official Holdings of Gold and U.S. Dollars, this matter is dealt with in more detail. Another example is the inventory valuation adjustment, required to convert changes in book values to the value of the physical change.

(9) *The Problem of Timing or Float*

A second problem on which even less progress has been made is the problem of float. This pervasive phenomenon arises when the two parties to a transaction do not record it at the same moment of time. For example, where goods are shipped from seller to purchaser, the purchase may be recorded at the end of the journey and the sale at the beginning. While the goods are in transit, the combined inventories of both will be too low, and receivables less payables too high, by the amount of goods float. When the buyer sends his cheque in settlement, he reduces cash on his books, while the seller does not record an increase until the cheque reaches him, the offsetting imbalance being in trade credit; this is mail float. Finally, the bank will increase the seller's balance as soon as the cheque is deposited, and this item will be in transit until the cheque is finally cleared back against the purchaser's account. This is so called bank float; the total amount of items in transit within the chartered banking system was one billion dollars at the end of 1955, a fact which illustrates the magnitude of the timing problem. The problems presented by goods float primarily affect the current income and expenditure account, and no comments will be made upon them here, but mail and bank float affect financial transactions exclusively.

If the lack of information imposed no limitations, it would be possible to measure the increase in the amount of bank cash which each sector records on its own books, being the value of cheques received and deposited less the value of cheques written and dispatched. It would also be possible to measure the increase in the bank cash recorded for each sector in the bank's books, after deduction of that proportion of the items in transit which will eventually be debited against it. The two measures would differ by the amount of mail float, the sector's own books showing a smaller increase by the rise in the amount of cheques written and dispatched but not yet deposited by the recipient. Perhaps the best theoretical solution is to date the transaction as occurring at the moment the recipient deposits the cheque. To implement this, the payer's cash and payables have to be increased by the amount of the mail float; in other words, the bank's records of each sector's cash (adjusted for bank float) would be accepted and the sector's cash and payables records adjusted accordingly. It is very difficult to visualize, however, in what way the necessary information could be obtained, particularly insofar as the calculation of mail float for each sector requires the allocation of bank float to each sector. An alternative solution to this problem accepts the fact that transactions are recorded at different times in the

[7] For example the foreign currency assets of the Exchange Fund were written down by over $160 million in 1946.

real world and does not attempt to adjust the sectors' own records of cash and payables; in other words the transaction is dated at the time the cheque is dispatched by the payer and at the time it is deposited by the payee. The necessary adjustments of both the cash and payables categories by the amount of total mail float may then be made either in an additional column in the matrix or within the banking sector itself. The main practical advantage of this solution is that it requires only an independent measure of each sector's cash records and the calculation of mail float in total; not a sector distribution of bank and mail float. For some purposes it may also be advantageous to record each sector's transactions as it views them itself. The disadvantages are the failure to record all aspects of a transaction consistently in time and the distortion of total debits and credits in the cash and payables categories.

In fact, even this course cannot be followed, since independent estimates of personal holdings of cash are not available. What has been done is to record total bank deposit credits as the increase in gross deposits less bank float, and to estimate the consumer sector's debits residually. These are likely therefore to be too high by the increase in mail float. Furthermore, receivables and payables are not completely segregated from other transactions and errors, and so the equal and opposite error is included there.

Another aspect of this problem is the distinction between cash and accrual accounting. Some transactors more or less consistently record their transactions at the time cash changes hands, some at the time the obligation to pay is recognized. In general, business tends to practice full accrual accounting, while governments and persons tend to record the cash flows of their receipts and expenditures. A single unified accounting system should, however, be constructed consistently on one basis or the other, and of the two the accrual basis is much to be preferred. Much of the basic information comes from business records and is thus in the accrual form; when measuring the current output of goods and services, the accrual basis is more appropriate; and it is quite easy to convert an accrual account to a cash account if the latter should appear more appropriate for specific analytical purposes, while the conversion from a cash basis to an accrual basis is impossible without additional information on payables and receivables. Thus corporate tax receipts, for example, are converted from the cash basis in which they appear in the *Public Accounts* to the accrual basis used in business accounting. The personal sector account does retain some cash element, however, in such items as net farm income received. This is discussed more fully with reference to the Canadian Wheat Board in the description of the Sector IV (a) account.

(10) *Coverage*

Mention should also be made of one further technical point of a general nature. Where transactions are being estimated for a group of transactors by calculating the change in assets and liabilities, a problem can arise if the group is not composed of the same individuals throughout the period. If a transactor enters the group from some other sector, the change in assets and liabilities will be inflated by its balance sheet at the time of entry and an appropriate correction must be made. The most important instance of such movements of transactors across the sector boundaries requiring coverage adjustments is the new incorporation of previously unincorporated businesses.

(11) *On the Accuracy of the Estimates*

It is not possible to be very specific about the possible margins of error in the results, but it may be worthwhile recording the following general impressions of the reliability of those parts of the accounts which are not drawn directly from the National Income and Expenditure Accounts.

The weakest sectors are of course Sectors I and II, and the estimates must be treated with the greatest caution except in those categories such as insurance and pensions where they are based on reliable statistics. In general, the results are only to be taken as indicating the orders of magnitude rather than as firm estimates within specifiable limits of error. Improvement in this area is the most important task awaiting those who will be concerned with the development of the National Transactions Accounts in the future, and one of the most useful methods of doing so will be the improvement of the estimate of the transactions of non-financial corporations, which must also be treated with considerable caution in their present form. The limitations on *Taxation Statistics* as a source for this type of purpose are discussed in the notes on Sector III.

What can be said about the quality of other sectors? Government enterprises and the financial institutions are well documented and so the estimates presented here are fairly reliable within the limits of their coverage, except insofar as valuation adjustments have not been correctly made. The Federal Government sector is good but not as good as might be expected, due principally to the difficulty of obtaining all the information required on a calendar year rather than a fiscal year basis and also to the lack of data on accruals. For the Provincial governments, practically no independent information is available except on a fiscal year basis and so the estimates are less reliable, while the Municipal government figures are, at the very best, impressionistic. The Rest of the World Account is by and large as good as the Balance of Payments from which it is drawn.

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B

THE SUMMARY TABLES IN MATRIX FORM

NATIONAL TRANSACTIONS ACCOUNTS
1946
(Millions of Dollars)

SECTORS / CATEGORIES	I CONSUMERS Dr	I CONSUMERS Cr.	II UNINCORP'D BUSINESS Dr	II UNINCORP'D BUSINESS Cr	III NON-FINANCIAL CORPORATIONS Dr	III NON-FINANCIAL CORPORATIONS Cr	IV GOVERNMENT ENTERPRISES Dr	IV GOVERNMENT ENTERPRISES Cr	V BANKING Dr	V BANKING Cr	VI LIFE INSURANCE Dr	VI LIFE INSURANCE Cr	VII OTHER FINANCE Dr	VII OTHER FINANCE Cr	VIII FEDERAL GOVERNMENT Dr.	VIII FEDERAL GOVERNMENT Cr	IX PROVINCIAL GOVERNMENTS Dr.	IX PROVINCIAL GOVERNMENTS Cr.	X MUNICIPAL GOVERNMENTS Dr	X MUNICIPAL GOVERNMENTS Cr	XI REST OF THE WORLD Dr.	XI REST OF THE WORLD Cr.	TOTAL Dr.	TOTAL Cr
A CURRENT TRANSACTIONS ACCOUNT					Combined			Business Dr	Cr		Account													
A 1 LABOUR SERVICE	168	5,627						4,736							686		130		237				5,627	5,627
A 2 CAPITAL SERVICE		917						[illegible]							444	[illegible]	70	173	40	62	7	[illegible]	[illegible]	[illegible]
A.3 PROPRIETOR SERVICE		[illegible]						[illegible]															[illegible]	[illegible]
A 4 TRANSFERS INCLUDING TAXES	[illegible]	[illegible]						1,965							1,059	[illegible]	245	[illegible]	23	414			[illegible]	[illegible]
A.5 GOODS AND SERVICES, n.e.i.	7,763								11,002						444		46		69		[illegible]	[illegible]	[illegible]	[illegible]
A 6 GROSS SAVING	892							1,316							-202		202		107		-333		[illegible]	
TOTAL (A ACCOUNT)	9,869	9,869						11,002	11,002						2,371	2,371	695	[illegible]	406	406	2,677	[illegible]	27,3[illegible]	27,3[illegible]
B. INVESTMENT TRANSACTIONS ACCT.																								
B.1 GROSS SAVING (a) Capital Consumption etc.				477		415		100		4		1		1										[illegible]
(b) Other Saving		[illegible]				[illegible]		22		17		*		[illegible]		[illegible]		[illegible]		[illegible]		-333		[illegible]
(c) Residual of Nat'l Accts						62																		[illegible]
B.2 CHANGE IN INVENTORIES			101		263		-31								-27		2						[illegible]	
B.3 GROSS FIXED CAPITAL (a) Residential			335		18								15		39								[illegible]	
(b) Non-Residential			323		[illegible]		[illegible]		5		*		[illegible]		34		103		[illegible]				[illegible]	
SAVING MINUS INVESTMENT	892		-282		[illegible]		[illegible]		24		1		-4		-249		97		-3		-333			
TOTAL (B ACCOUNT)	892	892	477	477	673	673	122	122	30	30	[illegible]	[illegible]	12	12	-202	[illegible]	202	202	107	107	-333	-333	[illegible]	[illegible]
C FINANCIAL TRANSACTIONS ACCT.																								
SAVING MINUS INVESTMENT		892		-282		-203		59		24		1		-4		-249		97		-3		333		
C. 1 CURRENCY AND DEPOSITS (a) Gold									204													[illegible]	[illegible]	[illegible]
(b) Currency & Bank Deposits	[illegible]				[illegible]		40		[illegible]	225	[illegible]		[illegible]		897	2	33		6		-79	[illegible]	[illegible]	[illegible]
(c) Other Inst. Deposits	121				[illegible]								1	143	*		*				[illegible]		143	143
C 2 CHARGE & INSTALMENT CREDIT (a) Consumer Charge Accounts			11		[illegible]																		[illegible]	[illegible]
(b) Instalment Credit		29	6	13									24										[illegible]	[illegible]
C 3 LOANS (a) Bank Loans		7		22		69		1	103			-12		28		-4		-11		4			[illegible]	[illegible]
(b) Other Loans		41		-5		6					[illegible]		23	-2	650		-1	-2	[illegible]	*		[illegible]	[illegible]	[illegible]
C.4 CLAIMS ON ASSOC. ENTERPRISES (a) Non-corporate	118			118																			[illegible]	[illegible]
(b) Corporate					[illegible]	298			[illegible]		[illegible]		[illegible]	16							[illegible]	[illegible]	[illegible]	[illegible]
(c) Government							43	[illegible]	[illegible]	-26				45	[illegible]		43		*				[illegible]	[illegible]
C.5 MORTGAGES	67			150	[illegible]	19	*		*		[illegible]		57		[illegible]		*		*				[illegible]	[illegible]
C 6 BONDS (a) Govt. of Canada Bonds	-255				[illegible]		[illegible]	-39	[illegible]		[illegible]		[illegible]		[illegible]	-50	[illegible]				[illegible]		[illegible]	[illegible]
(b) Provincial Bonds							7	19	[illegible]		1		[illegible]				[illegible]	6	[illegible]	*	[illegible]		[illegible]	[illegible]
(c) Municipal Bonds							[illegible]	*	[illegible]		[illegible]		[illegible]				-6		-16	-21	[illegible]		[illegible]	[illegible]
(d) Other Bonds	3				[illegible]	16	*	22	-100		[illegible]		[illegible]	9			[illegible]				[illegible]	[illegible]	[illegible]	[illegible]
C 7 STOCKS						69					*	*	[illegible]	*			*				[illegible]	[illegible]	[illegible]	[illegible]
C.8 INSURANCE AND PENSIONS	255							*				[illegible]		11		54							[illegible]	[illegible]
C.9 FOREIGN INHERITANCES AND MIGRANTS' FUNDS	35	65																			[illegible]	35	[illegible]	[illegible]
D. OTHER TRANSACTIONS AND ERRORS	[illegible]	42			182	-71	150	25	5	11	1	-4	[illegible]	26	40	40	[illegible]	19	17	25		[illegible]	[illegible]	[illegible]
TOTAL (C AND D ACCOUNTS)	[illegible]	1,103	16	16	202	[illegible]	-21	-21	234	234	176	176	277	277	[illegible]	-206	[illegible]	[illegible]	[illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]

* Less than $ 0.5 million.

NATIONAL TRANSACTIONS ACCOUNTS
1947
(Millions of Dollars)

SECTORS / CATEGORIES	I CONSUMERS Dr	I Cr	II UNINCORP'D BUSINESS Dr.	II Cr.	III NON-FINANCIAL CORPORATIONS Dr.	III Cr	IV GOVERNMENT ENTERPRISES Dr.	IV Cr.	V BANKING Dr.	V Cr.	VI LIFE INSURANCE Dr.	VI Cr	VII OTHER FINANCE Dr	VII Cr	VIII FEDERAL GOVERNMENT Dr	VIII Cr	IX PROVINCIAL GOVERNMENTS Dr	IX Cr	X MUNICIPAL GOVERNMENTS Dr	X Cr	XI REST OF THE WORLD Dr	XI Cr	TOTAL Dr	TOTAL Cr
A. CURRENT TRANSACTIONS ACCOUNT			Combined					Business Dr	Cr	Account														
A 1 LABOUR SERVICE	[illegible]	[illegible]						5,545							[illegible]		[illegible]		26				[illegible]	[illegible]
A 2 CAPITAL SERVICE		[illegible]						[illegible]							[illegible]	109	[illegible]	[illegible]	[illegible]	67	[illegible]	337	[illegible]	[illegible]
A 3 PROPRIETOR SERVICE								[illegible]															[illegible]	[illegible]
A 4 TRANSFERS INCLUDING TAXES	[illegible]	[illegible]						[illegible]							[illegible]	2,460	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]
A.5 GOODS AND SERVICES, n.e.i.	[illegible]								[illegible]						[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
A 6 GROSS SAVING	[illegible]							[illegible]							745		270		[illegible]		[illegible]		[illegible]	
TOTAL (A ACCOUNT)	[illegible]	[illegible]						[illegible],474	[illegible],474						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B. INVESTMENT TRANSACTIONS ACCT																								
B.1 GROSS SAVING (a) Capital Consumption etc.				[illegible]		[illegible]		[illegible]		4		[illegible]		[illegible]										[illegible]
(b) Other Saving		[illegible]				[illegible]		39		[illegible]		[illegible]		[illegible]		745		[illegible]		[illegible]		-19		[illegible]
(c) Residual of Nat'l Accts						[illegible]																		[illegible]
B.2 CHANGE IN INVENTORIES			[illegible]		[illegible]		[illegible]								[illegible]		[illegible]						[illegible]	
B.3 GROSS FIXED CAPITAL (a) Residential			[illegible]		[illegible]								2		[illegible]								[illegible]	
(b) Non Residential			[illegible]		[illegible]		174		[illegible]		*		2		[illegible]		[illegible]		[illegible]				[illegible]	
SAVING MINUS INVESTMENT	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		*		1		[illegible]		[illegible]		[illegible]		[illegible]			
TOTAL (B ACCOUNT)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28	*	*	[illegible]	14	[illegible]	745	270	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C. FINANCIAL TRANSACTIONS ACCT.																								
SAVING MINUS INVESTMENT		[illegible]		[illegible]		[illegible]		[illegible]		20		*		10		[illegible]		[illegible]		[illegible]		[illegible]		
C. 1 CURRENCY AND DEPOSITS (a) Gold									[illegible]													[illegible]	[illegible]	[illegible]
(b) Currency & Bank Deposits					[illegible]		-11		[illegible]	[illegible]	[illegible]		32		[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
(c) Other Inst. Deposits	[illegible]				[illegible]								*	[illegible]	*		[illegible]				[illegible]		[illegible]	[illegible]
C.2 CHARGE & INSTALMENT CREDIT (a) Consumer Charge Accounts		70	[illegible]		[illegible]																		7	7
(b) Instalment Credit		[illegible]	[illegible]	[illegible]	[illegible]								[illegible]										[illegible]	[illegible]
C.3 LOANS (a) Bank Loans		[illegible]		[illegible]		[illegible]		[illegible]	[illegible]					[illegible]				[illegible]		[illegible]			[illegible]	[illegible]
(b) Other Loans		[illegible]		[illegible]		[illegible]					3		[illegible]	*	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]
C.4 CLAIMS ON ASSOC. ENTERPRISES (a) Non-corporate	[illegible]			[illegible]																			[illegible]	[illegible]
(b) Corporate					[illegible]	[illegible]			[illegible]		[illegible]		2	10							[illegible]	[illegible]	[illegible]	[illegible]
(c) Government							[illegible]	[illegible]	[illegible]	[illegible]				34	[illegible]		[illegible]	*	[illegible]	[illegible]			[illegible]	[illegible]
C.5 MORTGAGES				[illegible]	[illegible]	[illegible]	*		*		[illegible]		[illegible]		[illegible]		*		[illegible]				[illegible]	[illegible]
C.6 BONDS (a) Govt. of Canada Bonds	[illegible]				[illegible]		[illegible]	[illegible]	[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	[illegible]				[illegible]		[illegible]	
(b) Provincial Bonds							31	[illegible]	[illegible]		[illegible]		[illegible]				[illegible]	[illegible]	[illegible]	*	[illegible]		[illegible]	[illegible]
(c) Municipal Bonds	[illegible]				51		-2		[illegible]		[illegible]		[illegible]				[illegible]		-17	[illegible]	[illegible]		[illegible]	[illegible]
(d) Other Bonds						[illegible]	1	[illegible]	[illegible]		[illegible]		[illegible]	37			[illegible]				[illegible]	[illegible]	[illegible]	
C.7 STOCKS						[illegible]	3				[illegible]	*	[illegible]	[illegible]							[illegible]	1	[illegible]	
C.8 INSURANCE AND PENSIONS	[illegible]							*				[illegible]		[illegible]		[illegible]							[illegible]	[illegible]
C.9 FOREIGN INHERITANCES AND MIGRANTS FUNDS	[illegible]	69																			[illegible]	[illegible]	[illegible]	[illegible]
D. OTHER TRANSACTIONS AND ERRORS	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	-6	[illegible]	[illegible]	2	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
TOTAL (C AND D ACCOUNTS)	[illegible]	[illegible]	[illegible]	42	[illegible]	535	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44	44	[illegible]	[illegible]	[illegible]	[illegible]

* Less than $ 0.5 million.

NATIONAL TRANSACTIONS ACCOUNTS
1948
(Millions of Dollars)

SECTORS / CATEGORIES	I CONSUMERS Dr	I Cr	II UNINCORP'D BUSINESS Dr.	II Cr.	III NON-FINANCIAL CORPORATIONS Dr	III Cr.	IV GOVERNMENT ENTERPRISES Dr.	IV Cr	V BANKING Dr	V Cr	VI LIFE INSURANCE Dr.	VI Cr	VII OTHER FINANCE Dr	VII Cr	VIII FEDERAL GOVERNMENT Dr.	VIII Cr.	IX PROVINCIAL GOVERNMENTS Dr.	IX Cr	X MUNICIPAL GOVERNMENTS Dr.	X Cr	XI REST OF THE WORLD Dr.	XI Cr	TOTAL Dr.	TOTAL Cr
A. CURRENT TRANSACTIONS ACCOUNT			Combined					Business Dr	Account Cr															
A.1 LABOUR SERVICE	230	7,496						6,415							349		182		320				[illegible]	[illegible]
A.2 CAPITAL SERVICE								[illegible]							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]
A.3 PROPRIETOR SERVICE		2,747						2,747															[illegible]	[illegible]
A.4 TRANSFERS INCLUDING TAXES	1,040	604						2,515							720	2,505	400	780	30	542			[illegible]	[illegible]
A.5 GOODS AND SERVICES, n.e.i.	[illegible]								[illegible]						[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
A.6 GROSS SAVING	[illegible]							1,447							[illegible]		236		69		[illegible]		[illegible]	
TOTAL (A ACCOUNT)	12,125	12,125						14,205	14,205						2,606	2,606	967	967	640	640	3,633	3,633	34,176	34,176
B. INVESTMENT TRANSACTIONS ACCT																								
B.1 GROSS SAVING (a) Capital Consumption etc.				625		695		112		8		2		3										1,441
(b) Other Saving		994				257		-100		22		*		4		657		236		69		-417		1,923
(c) Residual of Nat'l Accts						-170																		-170
B.2 CHANGE IN INVENTORIES			-4		20		95						2		-18		4						[illegible]	
B.3 GROSS FIXED CAPITAL (a) Residential			540		25								41		26								635	
(b) Non-Residential			[illegible]		[illegible]		[illegible]		11		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]				[illegible]	
SAVING MINUS INVESTMENT	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		1		[illegible]		[illegible]		32		[illegible]		[illegible]			
TOTAL (B ACCOUNT)	994	994	625	625	775	775	12	12	26	26	2	2	8	8	657	657	236	236	69	69	-417	[illegible]	[illegible]	[illegible]
C. FINANCIAL TRANSACTIONS ACCT.																								
SAVING MINUS INVESTMENT		994		[illegible]				[illegible]		[illegible]		1		-3		[illegible]		[illegible]		[illegible]		[illegible]		
C.1 CURRENCY AND DEPOSITS (a) Gold									115										*			115	115	115
(b) Currency & Bank Deposits	536				102		18		-9	709	-8		7		17	4	36		10		-27	-42	671	671
(c) Other Inst. Deposits	-				14								-1	96	*		-1				*		96	96
C.2 CHARGE & INSTALMENT CREDIT (a) Consumer Charge Accounts		36	16		20																		36	36
(b) Instalment Credit		44	5	12	17								24										46	46
C.3 LOANS (a) Bank Loans		32		82		70		5	193					-1				26		14		6	195	195
(b) Other Loans		27		2		-3					6		22	2	64		-14	-5	-8	-15		62	70	70
C.4 CLAIMS ON ASSOC. ENTERPRISES (a) Non-corporate	209			209																			209	209
(b) Corporate					150	222			-4		-20		-7	8							71	-40	190	190
(c) Government						1	2	157		518				53	634		70	*	22	-2			727	727
C.5 MORTGAGES	151			315	-1	39	*		*		118		64		16		4						354	354
C.6 BONDS (a) Govt. of Canada Bonds	-529				-106		-64	-46	445		172		4		108	-179	*		-13		100		-226	-226
(b) Provincial Bonds							-22	112	-40		23		1				67	121	-2	71	-25		305	305
(c) Municipal Bonds	136				*		-1	-1	7		35		20				6		1	-22	-20		-23	-23
(d) Other Bonds						134	*	48	519		213		33	18			1				-24	420	620	620
C.7 STOCKS						48	*				13	*	20	8							7	9	65	65
C.8 INSURANCE AND PENSIONS	306							1				212		9		85							306	306
C.9 FOREIGN INHERITANCES AND MIGRANTS' FUNDS	50	84																			84	50	134	134
D. OTHER TRANSACTIONS AND ERRORS	5	-279			294	336	10	23	4	-13	8	3	15	47	30	199	2	-3	11	60		5	378	378
TOTAL (C AND D ACCOUNTS)	938	938	21	21	490	490	-57	-57	1,229	1,229	215	215	201	201	869	869	171	171	22	22	166	166	4,266	4,266

* Less than $ 0.5 million.

NATIONAL TRANSACTIONS ACCOUNTS
1949
(Millions of Dollars)

CATEGORIES \ SECTORS	I CONSUMERS Dr	I CONSUMERS Cr	II UNINCORP'D BUSINESS Dr	II UNINCORP'D BUSINESS Cr	III NON-FINANCIAL CORPORATIONS Dr	III NON-FINANCIAL CORPORATIONS Cr	IV GOVERNMENT ENTERPRISES Dr	IV GOVERNMENT ENTERPRISES Cr	V BANKING Dr	V BANKING Cr	VI LIFE INSURANCE Dr	VI LIFE INSURANCE Cr	VII OTHER FINANCE Dr	VII OTHER FINANCE Cr	VIII FEDERAL GOVERNMENT Dr	VIII FEDERAL GOVERNMENT Cr	IX PROVINCIAL GOVERNMENTS Dr	IX PROVINCIAL GOVERNMENTS Cr	X MUNICIPAL GOVERNMENTS Dr	X MUNICIPAL GOVERNMENTS Cr	XI REST OF THE WORLD Dr	XI REST OF THE WORLD Cr	TOTAL Dr	TOTAL Cr
A. CURRENT TRANSACTIONS ACCOUNT						Combined		Business Dr	Cr.		Account													
A.1 LABOUR SERVICE	262	8,115						6,866							434		196		357				[illegible]	[illegible]
A.2 CAPITAL SERVICE		1,043						1,197							461	123	72	195	39	101	[illegible]	[illegible]	[illegible]	[illegible]
A.3 PROPRIETOR SERVICE		[illegible]						[illegible]															[illegible]	[illegible]
A.4 TRANSFERS INCLUDING TAXES	1,028	971						2,596							770	2,458	499	885	33	612			[illegible]	[illegible]
A.5 GOODS AND SERVICES, n.e.i.	10,661								[illegible]						[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
A.6 GROSS SAVING	[illegible]							[illegible]							[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
TOTAL (A ACCOUNT)	[illegible]	[illegible]						[illegible]	[illegible]						[illegible]	[illegible]	[illegible]	[illegible]	713	713	[illegible]	[illegible]	36,46[illegible]	[illegible]
B. INVESTMENT TRANSACTIONS ACCT.																								
B.1 GROSS SAVING (a) Capital Consumption etc.				742		790		130		5		2		5										[illegible]
(b) Other Saving		926				420		-111		29		*		26		669		181		66		-168		[illegible]
(c) Residual of Nat'l Accts						-87																		[illegible]
B.2 CHANGE IN INVENTORIES			[illegible]		[illegible]		[illegible]						*		[illegible]		[illegible]						[illegible]	
B.3 GROSS FIXED CAPITAL (a) Residential			713		38								43		28								[illegible]	
(b) Non-Residential			[illegible]		[illegible]		37		[illegible]		[illegible]		4		[illegible]		[illegible]		[illegible]				[illegible]	
SAVING MINUS INVESTMENT	[illegible]		[illegible]		[illegible]		-37[illegible]		[illegible]		*		-10		[illegible]		*		[illegible]		[illegible]			
TOTAL (B ACCOUNT)	926	[illegible]	742	742	1,122	[illegible]	[illegible]	1	34	34	[illegible]	[illegible]	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	66	[illegible]	[illegible]	[illegible]	[illegible]
C. FINANCIAL TRANSACTIONS ACCT.																								
SAVING MINUS INVESTMENT		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		*		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		
C.1 CURRENCY AND DEPOSITS (a) Gold									89													[illegible]		
(b) Currency & Bank Deposits	225				68		-48		92	272	6		6		-124	5	18		9		40	[illegible]	[illegible]	[illegible]
(c) Other Inst. Deposits	–				[illegible]								[illegible]	[illegible]	*		*				[illegible]		[illegible]	[illegible]
C.2 CHARGE & INSTALMENT CREDIT (a) Consumer Charge Accounts		20	8		12																		20	20
(b) Instalment Credit		[illegible]	[illegible]	4	[illegible]								[illegible]											
C.3 LOANS (a) Bank Loans		24		24		4		26	95			*		15				-19		16		4	95	95
(b) Other Loans		[illegible]		[illegible]		[illegible]							[illegible]	*	113		[illegible]	[illegible]	[illegible]	*		[illegible]	[illegible]	[illegible]
C.4 CLAIMS ON ASSOC. ENTERPRISES (a) Non-corporate	306			306																			306	306
(b) Corporate					[illegible]	294			-11		-45		-13	12							94	-74	232	232
(c) Government						*	[illegible]	[illegible]		[illegible]				[illegible]	[illegible]		[illegible]	*	[illegible]	[illegible]			[illegible]	[illegible]
C.5 MORTGAGES	177			370		58	*		*		115		110		15		12						[illegible]	[illegible]
C.6 BONDS (a) Govt. of Canada Bonds	-297				-5		-59	28	141		-181		-5		-368	-768	28		-4		10		-740	-74[illegible]
(b) Provincial Bonds							-17	167			80		-27				27	103	*	-16	-6		254	254
(c) Municipal Bonds	233				1		4		21		40		44				5		5	116	-2		110	116
(d) Other Bonds						[illegible]		[illegible]	[illegible]		[illegible]		[illegible]	33	7		[illegible]				[illegible]	[illegible]	[illegible]	[illegible]
C.7 STOCKS						44	-1				3	*	22	18							-10	-21	41	41
C.8 INSURANCE AND PENSIONS	[illegible]							2				231		11		68								
C.9 FOREIGN INHERITANCES AND MIGRANTS' FUNDS	59	68																			68	59	127	127
D. OTHER TRANSACTIONS AND ERRORS	6	-58		[illegible]	202	35	18	16	-8	-29	16	2	27	30	28	69	7	93	27	51		115	324	[illegible]
TOTAL (C AND D ACCOUNTS)	[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	529	[illegible]	-54	390	390	[illegible]	232	[illegible]	297	[illegible]	-147	[illegible]	172	63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Less than $ 0.5 million.

NATIONAL TRANSACTIONS ACCOUNTS
1950
(Millions of Dollars)

CATEGORIES \ SECTORS	I CONSUMERS Dr	I Cr.	II UNINCORPORATED BUSINESS Dr	II Cr	III NON-FINANCIAL CORPORATIONS Dr.	III Cr	IV GOVERNMENT ENTERPRISES Dr	IV Cr.	V BANKING Dr	V Cr	VI LIFE INSURANCE Dr.	VI Cr	VII OTHER FINANCE Dr	VII Cr	VIII FEDERAL GOVERNMENT Dr	VIII Cr	IX PROVINCIAL GOVERNMENTS Dr.	IX Cr.	X MUNICIPAL GOVERNMENTS Dr	X Cr.	XI REST OF THE WORLD Dr.	XI Cr	TOTAL Dr	TOTAL Cr
A CURRENT TRANSACTIONS ACCOUNT			Combined Business Account					Dr.	Cr.															
A.1 LABOUR SERVICE	[illegible]	[illegible]						[illegible]							471		[illegible]13		3[illegible]3				[illegible]	[illegible]
A.2 CAPITAL SERVICE		[illegible]						[illegible]78							427	146	76	[illegible]11	[illegible]	[illegible]	[illegible]	47	[illegible]	[illegible]
A.3 PROPRIETOR SERVICE		2,595						2,595															[illegible]	[illegible]
A.4 TRANSFERS INCLUDING TAXES	[illegible]	[illegible]						[illegible]							[illegible]	[illegible]	[illegible]	[illegible]	35	[illegible]			[illegible]	[illegible]
A.5 GOODS AND SERVICES, n.e.s.	[illegible]								[illegible]						356		[illegible]		227		[illegible]	[illegible]	[illegible]	[illegible]
A.6 GROSS SAVING	[illegible]							[illegible]							[illegible]		263		109		330		[illegible]	
TOTAL (A ACCOUNT)	[illegible]	[illegible]						16,479	[illegible]						[illegible]	2,995	[illegible]36	1,136	746	746	[illegible]	[illegible]	[illegible]	[illegible]
B INVESTMENT TRANSACTIONS ACCT																								
B.1 GROSS SAVING (a) Capital Consumption etc.				85[illegible]		807		145		7		2		6										[illegible]
(b) Other Saving		662				329		166		29		1		19		785		263		[illegible]		[illegible]		[illegible]
(c) Residual of Nat'l Accts						-13[illegible]																		[illegible]
B.2 CHANGE IN INVENTORIES			[illegible]		[illegible]		[illegible]						[illegible]		[illegible]		3						[illegible]	
B.3 GROSS FIXED CAPITAL (a) Residential			823		43								17		40									
(b) Non-Residential			[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		177		[illegible]				[illegible]	
SAVING MINUS INVESTMENT	[illegible]		[illegible]		[illegible]		[illegible]		17		-1		[illegible]		635		63		-113		330			
TOTAL (B ACCOUNT)	[illegible]	[illegible]	857	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36		3		[illegible]	[illegible]	785	7	263	[illegible]	109	[illegible]	330	[illegible]	1,47[illegible]	[illegible]
C. FINANCIAL TRANSACTIONS ACCT.																								
SAVING MINUS INVESTMENT		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		
C.1 CURRENCY AND DEPOSITS (a) Gold									101													101	[illegible]	[illegible]
(b) Currency & Bank Deposits	156				118		26		248	844	6		24		74	7	-9		12		209	2	[illegible]	[illegible]
(c) Other Inst. Deposits	74				14								1	90	-1		*				1		[illegible]	[illegible]
C.2 CHARGE & INSTALMENT CREDIT (a) Consumer Charge Accounts		[illegible]	12		1[illegible]																		[illegible]	[illegible]
(b) Instalment Credit		124	17	23	22								109										[illegible]47	[illegible]
C.3 LOANS (a) Bank Loans		110		122		224		-18	500					43				[illegible]		13			500	[illegible]
(b) Other Loans		[illegible]		[illegible]							[illegible]		[illegible]		47		[illegible]	[illegible]	*	5		[illegible]	[illegible]	
C.4 CLAIMS ON ASSOC. ENTERPRISES (a) Non-corporate	407			407																			407	[illegible]
(b) Corporate					400	630			32		-12		-1	18							222	-8	64	[illegible]
(c) Government						*	[illegible]							1	[illegible]		[illegible]	*	[illegible]				[illegible]	[illegible]
C.5 MORTGAGES	205			481	2	65	*		*		167		163		8		1						[illegible]	[illegible]
C.6 BONDS (a) Govt. of Canada Bonds	72				137		-4	20	-102		-226		-12		55	113	73		-3		153		[illegible]	[illegible]
(b) Provincial Bonds							-10	103	-23		14		7				32	107	-1	-6	29		[illegible]	[illegible]
(c) Municipal Bonds	352				-37		-1		33		63		35				9		-3	131	10		[illegible]	[illegible]
(d) Other Bonds							[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	3		*				34	[illegible]	[illegible]	[illegible]
C.7 STOCKS						144	-1				2	*	22	30							26	-56	[illegible]	[illegible]
C.8 INSURANCE AND PENSIONS	322							*				[illegible]		[illegible]		[illegible]							[illegible]	[illegible]
C.9 FOREIGN INHERITANCES AND MIGRANTS' FUNDS	61	57																			57	61	118	11[illegible]
D. OTHER TRANSACTIONS AND ERRORS	19	64[illegible]			693	391	-12	19	18	-19	45	2	74	62	146	1	5	35	36	44		-156	1,022	1,[illegible]
TOTAL (C AND D ACCOUNTS)	1,668	1,668	[illegible]	[illegible]	1,364	1,364	[illegible]	[illegible]	1,358	1,358	[illegible]	[illegible]	461	461	817	[illegible]	[illegible]	[illegible]	73	73	740	74	[illegible]	[illegible]

* Less than $ 0.5 million.

NATIONAL TRANSACTIONS ACCOUNTS
1951
(Millions of Dollars)

SECTORS / CATEGORIES	I CONSUMERS		II UNINCORP'D BUSINESS		III NON-FINANCIAL CORPORATIONS		IV GOVERNMENT ENTERPRISES		V BANKING		VI LIFE INSURANCE		VII OTHER FINANCE		VIII FEDERAL GOVERNMENT		IX PROVINCIAL GOVERNMENTS		X MUNICIPAL GOVERNMENTS		XI REST OF THE WORLD		TOTAL	
	Dr	Cr	Dr	Cr.	Dr.	Cr.	Dr	Cr.	Dr.	Cr.	Dr.	Cr	Dr.	Cr	Dr	Cr	Dr	Cr.	Dr.	Cr	Dr	Cr.	Dr	Cr
A. CURRENT TRANSACTIONS ACCOUNT			Combined Business Account					Dr.	Cr															
A.1 LABOUR SERVICE	318	10,304						8,696							614		291		435				[illegible]	[illegible]
A.2 CAPITAL SERVICE		1,333						1,649							427	180	79	[illegible]	47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A.3 PROPRIETOR SERVICE		[illegible]						3,464															3,464	[illegible]
A.4 TRANSFERS INCLUDING TAXES	1,366	[illegible]						[illegible]							636	[illegible]	[illegible]	[illegible]	43	[illegible]			[illegible]	[illegible]
A.5 GOODS AND SERVICES, n.e.i.	13,142								[illegible]						819		[illegible]		278		4,974	[illegible]	[illegible]	[illegible]
A.6 GROSS SAVING	[illegible]							[illegible]							[illegible]		313		151		[illegible]		5,643	
TOTAL (A ACCOUNT)	16,160	16,160						19,807	19,807						3,986	3,986	1,410	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B. INVESTMENT TRANSACTIONS ACCT.																								
B.1 GROSS SAVING (a) Capital Consumption etc.				993		1,026		160		8		[illegible]		[illegible]										[illegible]
(b) Other Saving		1,334				-32		-12		32		*		19		[illegible]		[illegible]		[illegible]				
(c) Residual of Nat'l Accts						[illegible]																		[illegible]
B.2 CHANGE IN INVENTORIES			335		544		35						*		-16		5						[illegible]	
B.3 GROSS FIXED CAPITAL (a) Residential			[illegible]		[illegible]								6		52								947	
(b) Non-Residential			[illegible]		[illegible]		[illegible]		[illegible]		5		8		233		[illegible]		265				[illegible]	
SAVING MINUS INVESTMENT	1,334		-1,077		-1,426		-363		15		-3		10		1,021		78		[illegible]		[illegible]			
TOTAL (B ACCOUNT)	1,334	1,334	993	993	813	813	157	157	40	40	2	2	24	[illegible]	1,290	[illegible]	313	[illegible]	151	[illegible]	524	[illegible]	[illegible]	[illegible]
C. FINANCIAL TRANSACTIONS ACCT.																								
SAVING MINUS INVESTMENT		1,334		-1,077		-1,426		-363		15		-3		10		1,021				[illegible]		[illegible]		
C.1 CURRENCY AND DEPOSITS (a) Gold									274													274	274	274
(b) Currency & Bank Deposits	256				-117		12		96	22	-7		51		-105	6	27		22		-189	20	48	[illegible]
(c) Other Inst. Deposits	77				11								-2	85	1						-2		65	65
C.2 CHARGE & INSTALMENT CREDIT (a) Consumer Charge Accounts		29	9		20																		29	29
(b) Instalment Credit		-93	-22	37	-54								20										[illegible]	[illegible]
C.3 LOANS (a) Bank Loans		-19		66		206		16	229			*		-46				1		5			229	229
(b) Other Loans		[illegible]		[illegible]		[illegible]	2	-1			21		34	1	-56		6	[illegible]	-5		[illegible]		[illegible]	[illegible]
C.4 CLAIMS ON ASSOC. ENTERPRISES (a) Non-corporate	[illegible]			[illegible]																			[illegible]	[illegible]
(b) Corporate					417	679			55		-40		-3	29							[illegible]		[illegible]	
(c) Government						*	-4	374	3	222				51	377		229		[illegible]	[illegible]			[illegible]	[illegible]
C.5 MORTGAGES	108			410	3	101	2		*		205		185		5		3						[illegible]	[illegible]
C.6 BONDS (a) Govt. of Canada Bonds	-220				-90		-24	-48	-68		-140		-2		180	-485	14		[illegible]		[illegible]		[illegible]	
(b) Provincial Bonds							-4	21	-65		-18		12				69	278	-6	[illegible]	[illegible]		[illegible]	[illegible]
(c) Municipal Bonds	302				69		-3	*	-27		44		20				40		-20	166	63		166	166
(d) Other Bonds						261		-3	-245		172		18	110	-2		*				43	[illegible]	[illegible]	[illegible]
C.7 STOCKS						[illegible]	*			[illegible]	-7	1	[illegible]	19							107	[illegible]	[illegible]	[illegible]
C.8 INSURANCE AND PENSIONS	309							*				235		16		58							[illegible]	[illegible]
C.9 FOREIGN INHERITANCES AND MIGRANTS' FUNDS	70	77																			77	70	147	147
D. OTHER TRANSACTIONS AND ERRORS	6	63			734	959	60	44	-8	-22	2	*	-29	41	154	-47	6	41	49	10		-116	974	974
TOTAL (C AND D ACCOUNTS)	1,448	1,448	-13	-13	992	992	41	41	245	245	233	233	316	316	554	554	395	[illegible]	60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Less than $ 0.5 million.

NATIONAL TRANSACTIONS ACCOUNTS
1952
(Millions of Dollars)

SECTORS / CATEGORIES	I		II		III		IV		V		VI		VII		VIII		IX		X		XI		TOTAL	
	CONSUMERS		UNINCORP'D BUSINESS		NON-FINANCIAL CORPORATION		GOVERNMENT ENTERPRISES		BANKING		LIFE INSURANCE		OTHER FINANCE		FEDERAL GOVERNMENT		PROVINCIAL GOVERNMENTS		MUNICIPAL GOVERNMENTS		REST OF THE WORLD		TOTAL	
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr.	Dr	Cr	Dr	Cr	Dr	Cr	Dr.	Cr	Dr	Cr	Dr.	Cr.	Dr.	Cr	Dr	Cr.
A. CURRENT TRANSACTIONS ACC						Combined		Business Dr	Cr		Account													
A 1 LABOUR SERVICE	356	11,478						9,582							766		278		496				11,478	[illegible]
A 2 CAPITAL SERVICE		[illegible]						1,723							441	[illegible]	85	[illegible]	58	[illegible]	145	[illegible]	2,448	[illegible]
A 3 PROPRIETOR SERVICE		[illegible]						3,488															3,488	[illegible]
A 4 TRANSFERS INCLUDING TAXES	1,698	1,386						4,183							1,347	4,299	558	1,265	50	686			7,836	7,836
A 5 GOODS AND SERVICES, n e t	14,425								[illegible]						[illegible]		160		252		5,425	[illegible]	[illegible]	[illegible]
A 6 GROSS SAVING	1,291							[illegible]							756		429		175		-173		[illegible]	
TOTAL (A ACCOUNT)	17,770	17,770						22,568	22,568						4,530	4,530	1,510	1,510	1,510	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B. INVESTMENT TRANSACTIONS ACC																								
B.1 GROSS SAVING (a) Capital Consumption etc				1,045		1,178		184		7		2		6										[illegible]
(b) Other Saving		1,291				668		43		33		*		23		756		429		175		-173		[illegible]
(c) Residual of Nat'l Accts						403																		403
B 2 CHANGE IN INVENTORIES			344		37		[illegible]								[illegible]		5						[illegible]	
B.3 GROSS FIXED CAPITAL (a) Residential			873		46								14		38								972	
(b) Non-Residential			[illegible]		2,035		[illegible]		14		4		11		393		291		[illegible]				[illegible]	
SAVING MINUS INVESTMENT	[illegible]		1,073		131		-457		26		-2		3		253		143		-143		173			
TOTAL (B ACCOUNT)	1,290	1,291	1,045	1,045	2,249	2,249	227	227	40	40	3	3	28	28	756	756	429	429	175	175	-173	- 173	6,070	6,070
C. FINANCIAL TRANSACTIONS ACCT.																								
SAVING MINUS INVESTMENT		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		3		[illegible]		[illegible]		-143		-173		
C. 1 CURRENCY AND DEPOSITS (a) Gold									43													43	43	43
(b) Currency & Bank Deposit	539				126		10		-121	342	6		19		-157	6	29		2		-71	34	382	[illegible]
(c) Other Inst. Deposits	119				11								2	[illegible]	-1		2				1		[illegible]	[illegible]
C.2 CHARGE & INSTALMENT CREDIT (a) Consumer Charge Accounts		25	8		18																		25	[illegible]
(b) Instalment Credit		[illegible]	33	[illegible]	66								227										346	346
C.3 LOANS (a) Bank Loans		76		46		93		-20	349			2		137				12		4			349	[illegible]
(b) Other Loans		[illegible]		[illegible]		[illegible]	3				[illegible]		54	-1	[illegible]		13	[illegible]	4	*	22	[illegible]	58	[illegible]
C.4 CLAIMS ON ASSOC. ENTERPRISES (a) Non-corporate	602			602														1					602	602
(b) Corporate					605	850			58		-47		3	27							346	69	965	965
(c) Government						1	30	303	3	103				72	250		165	*	32	2			480	480
C 5 MORTGAGES	193			[illegible]	[illegible]	[illegible]	*	1			[illegible]		120		2		-2		*				479	[illegible]
C.6 BONDS (a) Govt. of Canada Bonds	123				-187		*	*	68		-83		21		79	-139	13		*		-173		-140	-140
(b) Provincial Bonds							22	206	-16		49		24				72	57		8	46		271	271
(c) Municipal Bonds	211				180		-9		-8		26		28				20		*	164	25		164	164
(d) Other Bonds						[illegible]		[illegible]	70		125		26	[illegible]	1		[illegible]				158	[illegible]	[illegible]	[illegible]
C.7 STOCKS						227	1			1	11	*	26	34							93	-6	257	257
C 8 INSURANCE AND PENSIONS	351							[illegible]				[illegible]		[illegible]		[illegible]							[illegible]	[illegible]
C 9 FOREIGN INHERITANCES AND MIGRANTS' FUNDS	144	85																			85	144	229	229
D. OTHER TRANSACTIONS AND ERRORS		466			469	[illegible]	90	124	17	[illegible]	26	3	-4	[illegible]	31	[illegible]	16	[illegible]	21	[illegible]		[illegible]	706	706
TOTAL (C AND D ACCOUNTS)	2,326	2,326	41	41	1,313	[illegible]	146	[illegible]	462	[illegible]	274	[illegible]	556	556	153	153	348	34	58	58	530	[illegible]	[illegible]	[illegible]

NATIONAL TRANSACTIONS ACCOUNTS
1953
(Millions of Dollars)

SECTORS / CATEGORIES	I CONSUMERS Dr	I CONSUMERS Cr	II UNINCORPORATED BUSINESS Dr	II Cr	III NON FINANCIAL CORPORATIONS Dr	III Cr	IV GOVERNMENT ENTERPRISES Dr	IV Cr	V BANKING Dr	V Cr	VI LIFE INSURANCE Dr	VI Cr	VII OTHER FINANCE Dr	VII Cr	VIII FEDERAL GOVERNMENT Dr	VIII Cr	IX PROVINCIAL GOVERNMENTS Dr	IX Cr	X MUNICIPAL GOVERNMENTS Dr	X Cr	XI REST OF THE WORLD Dr	XI Cr	TOTAL Dr	TOTAL Cr
A. CURRENT TRANSACTIONS ACCOUNT			Combined Business Account				Dr.	Cr.																
A.1 LABOUR SERVICE	[illegible]	[illegible]						[illegible]							[illegible]		[illegible]		[illegible]				[illegible]	[illegible]
A.2 CAPITAL SERVICE		[illegible]													[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A.3 PROPRIETOR SERVICE		[illegible]																					[illegible]	
A.4 TRANSFERS INCLUDING TAXES	[illegible]	[illegible]						[illegible]							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]
A.5 GOODS AND SERVICES, n.e.i.	[illegible]								[illegible]						[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
A.6 GROSS SAVING	[illegible]														[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
TOTAL (A ACCOUNT)	[illegible]	[illegible]						[illegible]	[illegible]						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B. INVESTMENT TRANSACTIONS ACCT																								
B.1 GROSS SAVING (a) Capital Consumption etc.			[illegible]					[illegible]		7		3		5										
(b) Other Saving		[illegible]				[illegible]				[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]
(c) Residual of Nat'l Accts						[illegible]																		[illegible]
B.2 CHANGE IN INVENTORIES							[illegible]								[illegible]		[illegible]					[illegible]	[illegible]	[illegible]
B.3 GROSS FIXED CAPITAL (a) Residential					[illegible]								[illegible]		[illegible]								[illegible]	
(b) Non-Residential			[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]				[illegible]	
SAVING MINUS INVESTMENT	[illegible]			[illegible]	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]			
TOTAL (B ACCOUNT)	[illegible]	1,313	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	*	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C. FINANCIAL TRANSACTIONS ACCT																								
SAVING MINUS INVESTMENT		[illegible]		[illegible]		[illegible]		[illegible]		45		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		
C.1 CURRENCY AND DEPOSITS (a) Gold									[illegible]													[illegible]		[illegible]
(b) Currency & Bank Deposits	[illegible]				[illegible]		[illegible]		[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]					[illegible]		
(c) Other Inst. Deposits	[illegible]				[illegible]		*						[illegible]	[illegible]	*							[illegible]		[illegible]
C.2 CHARGE & INSTALMENT CREDIT (a) Consumer Charge Accounts		[illegible]	[illegible]		[illegible]																			
(b) Instalment Credit		[illegible]		[illegible]	[illegible]								[illegible]											[illegible]
C.3 LOANS (a) Bank Loans		[illegible]		[illegible]		345		70	[illegible]			4		27					[illegible]	[illegible]				
(b) Other Loans		[illegible]		[illegible]		[illegible]	*				[illegible]		70	*	[illegible]		[illegible]		[illegible]	[illegible]		[illegible]		[illegible]
C.4 CLAIMS ON ASSOC. ENTERPRISES (a) Non-corporate	[illegible]			[illegible]																				
(b) Corporate					[illegible]	[illegible]			[illegible]		[illegible]		[illegible]	33								[illegible]	[illegible]	
(c) Government						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]		[illegible]		[illegible]	[illegible]				
C.5 MORTGAGES				[illegible]							[illegible]		[illegible]		[illegible]		*						[illegible]	
C.6 BONDS (a) Govt. of Canada Bonds	[illegible]				[illegible]		7		[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	[illegible]				[illegible]		[illegible]	[illegible]
(b) Provincial Bonds							[illegible]	[illegible]	[illegible]		[illegible]		[illegible]				[illegible]	[illegible]	[illegible]				[illegible]	
(c) Municipal Bonds	[illegible]				[illegible]		[illegible]		[illegible]		1		[illegible]				[illegible]			[illegible]			[illegible]	
(d) Other Bonds						[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]		[illegible]					[illegible]	[illegible]	
C.7 STOCK						[illegible]				[illegible]	[illegible]	*	[illegible]	[illegible]								[illegible]	[illegible]	
C.8 INSURANCE AND PENSIONS	[illegible]							[illegible]				[illegible]		[illegible]			[illegible]							
C.9 FOREIGN INHERITANCES AND MIGRANTS' FUNDS	[illegible]	1																				[illegible]		[illegible]
D. OTHER TRANSACTIONS AND ERRORS	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
TOTAL (C AND D ACCOUNTS)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	*	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Less than $ 0.5 million.

NATIONAL TRANSACTIONS ACCOUNTS
1954
(Millions of Dollars)

SECTORS / CATEGORIES	I CONSUMERS Dr.	I CONSUMERS Cr.	II UNINCORP'D BUSINESS Dr.	II UNINCORP'D BUSINESS Cr.	III NON-FINANCIAL CORPORATIONS Dr.	III NON-FINANCIAL CORPORATIONS Cr.	IV GOVERNMENT ENTERPRISES Dr.	IV GOVERNMENT ENTERPRISES Cr.	V BANKING Dr	V BANKING Cr	VI LIFE INSURANCE Dr.	VI LIFE INSURANCE Cr	VII OTHER FINANCE Dr	VII OTHER FINANCE Cr	VIII FEDERAL GOVERNMENT Dr.	VIII FEDERAL GOVERNMENT Cr	IX PROVINCIAL GOVERNMENTS Dr	IX PROVINCIAL GOVERNMENTS Cr.	X MUNICIPAL GOVERNMENTS Dr.	X MUNICIPAL GOVERNMENTS Cr.	XI REST OF THE WORLD Dr.	XI REST OF THE WORLD Cr.	TOTAL Dr	TOTAL Cr
A. CURRENT TRANSACTIONS ACCOUNT						Combined		Business Dr	Cr		Account													
A.1 LABOUR SERVICE	433	[illegible]						[illegible]							[illegible]		[illegible]		[illegible]				[illegible]	[illegible]
A.2 CAPITAL SERVICE		[illegible]						[illegible]							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A.3 PROPRIETOR SERVICE		[illegible]						[illegible]															[illegible]	[illegible]
A.4 TRANSFERS INCLUDING TAXES	[illegible]	[illegible]						[illegible]							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]
A.5 GOODS AND SERVICES, n.e.i.	[illegible]								[illegible]						[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
A.6 GROSS SAVING	[illegible]							[illegible]							[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
TOTAL (A ACCOUNT)	[illegible]	[illegible]						[illegible]	22,789						4,444	4,444	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B. INVESTMENT TRANSACTIONS ACCT.																								
B.1 GROSS SAVING (a) Capital Consumption etc.				1,170		1,507		211		9		3		[illegible]										[illegible]
(b) Other Saving		809				[illegible]		8		25		1		48		186		456		166		[illegible]		[illegible]
(c) Residual of Nat'l Accts						[illegible]																		[illegible]
B.2 CHANGE IN INVENTORIES			-46		-47		-37								-4		1						[illegible]	
B.3 GROSS FIXED CAPITAL (a) Residential			1,158		61								6		11								[illegible]	
(b) Non-Residential			886		1,982		639		20		12		14		279		300		352				[illegible]	
SAVING MINUS INVESTMENT	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]			
TOTAL (B ACCOUNT)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	456	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C. FINANCIAL TRANSACTIONS ACCT.																								
SAVING MINUS INVESTMENT		809		-828		68		[illegible]		[illegible]		[illegible]		32		[illegible]		[illegible]		[illegible]		[illegible]		
C.1 CURRENCY AND DEPOSITS (a) Gold									[illegible]													[illegible]	[illegible]	[illegible]
(b) Currency & Bank Deposits	[illegible]				116		-2		-105	488	-7		40		-265	2	24		15		67	1	[illegible]	[illegible]
(c) Other Inst. Deposits	241				66		*						-1	305			*				-1		[illegible]	[illegible]
C.2 CHARGE & INSTALMENT CREDIT (a) Consumer Charge Accounts		23	10		14																		[illegible]	[illegible]
(b) Instalment Credit		[illegible]	12	[illegible]	27								-45										[illegible]	[illegible]
C.3 LOANS (a) Bank Loans		16		19		38		32	60			-1		[illegible]				-4		10		[illegible]	[illegible]	[illegible]
(b) Other Loans		[illegible]		[illegible]		4	[illegible]				[illegible]		[illegible]	1	[illegible]			-3	-3	[illegible]		[illegible]	[illegible]	[illegible]
C.4 CLAIMS ON ASSOC. ENTERPRISES (a) Non-corporate																							[illegible]	
(b) Corporate					356	656			68		-31		*	15							[illegible]	[illegible]	[illegible]	[illegible]
(c) Government						1	7	-71	-1	119				83	-67		136		58	2			[illegible]	[illegible]
C.5 MORTGAGES	436			747	8	186	*	-1	74		237		166		4		[illegible]						[illegible]	[illegible]
C.6 BONDS (a) Govt. of Canada Bonds	[illegible]				-33		29	388	456		-194		44		-118	-573	-59		2		[illegible]		[illegible]	[illegible]
(b) Provincial Bonds							26	188	-14		34		44				66	76	6	14	[illegible]		[illegible]	[illegible]
(c) Municipal Bonds							9				37		46				16		7	248	[illegible]		[illegible]	[illegible]
(d) Other Bonds	-12				164	400	-2	-10	41		190		67	-14	[illegible]		-11				[illegible]		[illegible]	[illegible]
C.7 STOCKS						99				42	12		56	48							[illegible]	-3	[illegible]	[illegible]
C.8 INSURANCE AND PENSIONS	416							*				327		27		62							[illegible]	[illegible]
C.9 FOREIGN INHERITANCES AND MIGRANTS' FUNDS	[illegible]	[illegible]																				[illegible]	[illegible]	[illegible]
D. OTHER TRANSACTIONS AND ERRORS	9	715			[illegible]	[illegible]	41	-34	5	30	27	2	-10	34	-49	59	16	28	[illegible]	8		[illegible]	737	[illegible]
TOTAL (C AND D ACCOUNTS)	[illegible]	1,748	21	21	1,377	1,377	109	109	694	694	320	320	478	478	-550	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Less than $ 0.5 million.

C

THE SECTORS AND CATEGORIES IN DETAIL

SECTOR I. CONSUMERS

SECTOR II. UNINCORPORATED BUSINESS

These two sectors are discussed together not only for reasons of convenience but also because the division between them is not the usual clear boundary line between two separate groups of transactors but rather a distinction between different types of functions exercised by the same group of transactors. The two sectors together contain resident persons in both their consumer and business roles and the various associations of persons formed for non-profit purposes, as opposed to business corporations, the principal financial enterprises, governments and non-resident transactors, which make up the remaining sectors. These are both in concept and in measurement the residual sectors, the transactors remaining after others have been identified and enumerated. Thus self-administered or trusteed pension funds are included here because the lack of data has made it impossible to show them separately as financial intermediaries. Similarly other forms of private trust funds might conceptually be segregated but in fact are not and are included here.

Some of these transactors however appear in the national accounting system in two roles; on the one hand, they buy as consumers and receive income as owners of the factors of production; on the other, they engage in business as proprietors of farms and other unincorporated enterprises. The National Income and Expenditure Accounts distinguish of course between the two types of transactions in the non-financial area. Unincorporated business is included in the business sector, with the proviso that all net earnings accrue to the owners in the current year. The personal income and expenditure account, on the other hand, is concerned not with business transactions, but with receipts of factor incomes and transfers and with consumer purchases and tax payments. Since the National Transactions Accounts are designed explicitly as an extension of the income and expenditure accounts and maintain the boundaries between the sectors distinguished there, the financial transactions of individuals in their consumer and business roles must also be distinguished although this is much more difficult. What has been done is to allocate to unincorporated business those transactions which may clearly be identified as business transactions and include all others in the Consumer Sector. Those which fall in the first class include all capital formation and depreciation on business capital; the extension of charge and instalment credit by unincorporated retailers, and instalment borrowing on commercial and industrial goods; and bank borrowing by unincorporated business firms. It is particularly important to note that housing is a business activity in the national accounts definition; thus new residential construction is undertaken by business, and mortgage borrowing is entered in Sector II rather than Sector I, although to the extent that persons lend on mortgage security, either in connection with the sale of their property or for investment purposes, such debits are included in

the Consumer Sector. No way has been found however of identifying any of the transactions in cash or other liquid assets as business transactions, and changes in persons' holdings of cash deposits and securities are recorded in the Consumer Sector exclusively. In many cases, the proprietors of unincorporated businesses undoubtedly do segregate such liquid assets between their personal and business accounts, but no such information is recorded on the aggregate level and perhaps its economic significance would not be great. In the last resort, one must recognize that a functional distinction of this type is not as concrete and meaningful as the enterprise or transactor distinction which underlies the rest of the National Transactions Accounts classification.

If the two types of functions of individuals are to be distinguished in this way, some bridge must be constructed to join them, and this is found in the category C4(a), Claims on Associated Enterprises, Non-Corporate. Recorded here is the increase in individuals' equity in their business operations, and it is calculated as the residual credit of Sector II. Its amount therefore depends on the selection of business transactions, and should not be interpreted as having independent significance.

Perhaps the use of the term 'Consumer' to characterize the non-business transactions of individuals is misleading: perhaps Sector I should have been called the personal sector, as indeed it is in the national income and expenditure accounts. The term 'Consumer' has been chosen, however, in order to emphasize the exclusion of business transactions and to avoid possible confusion between the Accounts for Sector I and the Direct Estimate of Personal Saving published in the Bank of Canada *Statistical Summary.*[1] This is a calculation of the investment and financial transactions of individuals in both their business and non-business roles—and thus comparable in coverage to a consolidation of the Sector I and Sector II accounts. The Direct Estimate of Personal Saving was one of the most important forerunners of the National Transactions Accounts, and the methods which were developed in connection with it have been widely used in these estimates.

The transactions of individuals could not be measured from any independent comprehensive source during the period for which the accounts were prepared. In 1956, the Dominion Bureau of Statistics surveyed for the first time the assets and liabilities of a sample of non-farm households,[2] and it may be that the development of this technique will lead in time to reliable estimates of the aggregate transactions of individuals. Until then, however, it will be necessary to build up the Sector I and II accounts, category by category, from the information available from other sources. In some cases, the Consumer Sector's transactions can be readily identified in the accounts of the other party to the transactions, as in the case of consumer

1 See also D. J. R. Humphreys, *Personal Saving in Canada.*

2 Dominion Bureau of Statistics. Reference Paper No. 80. *Incomes, Liquid Assets, and Indebtedness of Non-farm Families in Canada, 1955.*

charge accounts and policyholders' saving. In others, however, they are calculated as the residual within the category, being the difference between total credits and the observed debits for all other sectors in such categories as cash, bonds and stocks. Even this technique depends upon the ability to measure independently the transactions of Non-Financial Corporations, and in certain cases this cannot be done; then it is necessary to split some total between Sectors I or II on the one hand and Sector III on the other by the application of fixed percentages. In many cases, the percentages derived for the preparation of the Direct Estimate of Personal Saving were used. Some of them are quite arbitrary, although an effort has been made to establish their reasonableness in the eyes of those who are familiar with the various fields. Others have been derived from Census data on Wholesale and Retail Sales by corporate and non-corporate dealers and from such sources as *Taxation Statistics,* and D.B.S. *Types of Ownership of Manufacturing Industries in Canada, 1951,* from which ratios of the gross value of production in corporate and non-corporate enterprises may be derived. In all cases however, the use of fixed percentages eliminates the possibility of recording relative shifts in activity between sectors which may well be the most important phenomena to record.

The estimates for the Consumer and Unincorporated Business Sectors are thus the weakest of any in the National Transactions Accounts, and must be interpreted with great caution, as indicating no more perhaps than the general orders of magnitude.

Detailed comments on each category follow.

SECTOR I — DEBITS

C1(b). Currency and Bank Deposits:

The amount by which the estimated debits of other sectors fall short of total credits in this category is entered in Sector I; it may be broken down into Personal Saving Deposits, Currency — equal to 95 percent of General Public Holdings — and other bank deposits.

C1(c). Other Institutional Deposits:

Included are the changes in all deposits of the Quebec Savings Banks, Credit Unions and the Post Office Savings Bank, 75 percent of deposits at Newfoundland Savings Bank, 90 percent of Ontario Savings Office Deposits, all the savings certificates of Investors Syndicate and 70 percent of deposits and related liabilities of Trust and Other Mortgage Loan Companies; these percentages apply to total deposits less any identified as belonging to Sectors IV-XI.

C4(a). Claims on Associated Enterprises - Non-Corporate:

This is equal to the credit item in Sector II.

C5. Mortgages:

This estimate was supplied by C.M.H.C.

C6 (a)-(d) and C7. Bonds and Stocks:

The balance of all other sectors' debits over total credits in these categories is assigned to the Consumer Sector. Within each of the sub-categories, an estimate has been made separately for the combined debits of Sectors I and III, but the division between them has been made only for Government of Canada bonds and all other bonds and stocks.

C8. Insurance and Pensions:

Total debits within this category clearly belong here; they consist principally of policyholders' saving through life insurance companies and fraternal benefit societies, and saving in the form of Federal Government Annuities.

C9. Foreign Inheritances and Migrants' Funds:

These net flows of a non-current nature to non-residents are taken from the Balance of Payments.

D(b) Special Deposit and Trust Accounts:

A number of small items are included here; they are described in the notes on this category.

SECTOR I — CREDITS

B1(b). Other Saving:

The National Accounts estimate of personal saving is used.

C2(a). Consumer Charge Accounts:

By definition, all the items in this category are the liabilities of Sector I.

C2(b). Instalment Credit:

All instalment credit extended for the purchase of consumer goods is included here.

C3(a). Bank Loans:

These credits equal the sum of Personal Loans and loans to Religious, Education, Health and Welfare institutions.

3(b). Other Loans:

The largest items are loans by credit unions, small loan companies and licensed money lenders, life insurance companies and Fraternal Benefit Societies to their policyholders, and loans by the Federal government under the Veterans Land Act and various relief and settlement programmes. The basis for the estimates are of course the accounts of the lenders.

C9. Foreign Inheritances and Migrants' Funds:

Like the similar item on the debit side, these transactions are recorded from the Balance of Payments.

D(e). Residual:

This balances the Consumer Sector Account. Due to the nature of the category C4(a), this balancing item includes all errors and omissions in both the Consumer and Unincorporated Business Sectors.

SECTOR II — DEBITS

B2. Change in Inventories:

The following percentages of inventory change by industry as published in *National Accounts, Income and Expenditure, 1926-1956,* Table 26, are attributed to Sector II:

Agriculture	100	percent
Wholesale Trade	17	"
Retail Trade	55	"
Manufacturing	5	"

B3(a). Gross Fixed Capital Formation — Residential:

95 percent of total residential construction as reported in the National Accounts, Table 2, after exclusion of Sector VII debits, is allocated to Sector II.

B3(b). Gross Fixed Capital Formation — Non-Residential:

The following percentages of capital expenditures, as recorded in *Private and Public Investment in Canada,* are included here.

Agriculture	99	percent
Construction	50	"
Non-Profit Institutions	100	"
Commercial Services:		
Laundries	45	"
Theatres	37	"
Hotels	45	"
Other	100	"
Manufacturing:		
Foods	14.2	"
Leather	10.4	"
Textiles	3.5	"
Clothing	18.5	"
Wood	22.5	"
Printing	10.2	"
Iron and Steel	2.4	"
Transportation equipment	.5	"
Non-Ferrous Metals	.9	"
Non-Metallic Minerals	5.1	"
Chemicals	1.2	"
Miscellaneous	10.4	"

Trade:

Wholesale	16	percent
Independent Retail	100	"
Automobile Dealers	33	"

C3. Consumer Charge Accounts and Instalment Credit:

50 percent of such assets on the books of retailers other than department stores are assigned to Sector II.

SECTOR II — CREDITS

B1(a). Capital Consumption Allowances etc.:

The estimate for unincorporated businesses is taken from Table 51 of *National Accounts, Income and Expenditure, 1926-1956.*

C2(b). Instalment Credit:

All instalment credit extended for the purchase of commercial and industrial goods is included here.

C3(a). Bank Loans:

Certain percentages of loans extended to various business borrowers are assumed to be the liabilities of unincorporated businesses:

Farmers	100	percent
Chemical and Rubber Products	1	"
Food, Beverages and Tobacco	14	"
Forest Products	10	"
Furniture	10	"
Iron and Steel Products	2	"
Textiles, Leather and Clothing	10	"
Other Industrial Products	10	"
Merchandisers	50	"
Construction Contractors	50	"
Other Business	50	"

C3(b). Other Loans:

Certain loans from credit unions, and provincial and municipal governments and lending institutions are included here. An appreciable proportion of these loans is made to farmers.

C4(a). Investment in Associated Enterprise — Non-Corporate:

This is the balancing item in the Sector account, and appears as a debit in Sector I.

C5. Mortgages:

The balance of mortgage credits unallocated to other sectors is included here.

SECTOR III — NON-FINANCIAL CORPORATIONS

Included in this sector are private non-financial corporations, incorporated co-operatives, and the following financial enterprises: holding companies, real estate operators and agents, stock, bond and commodity dealers, and insurance agents. Also included are the unincorporated branches of foreign corporations and the Canadian operations of foreign owned corporations. Excluded are financial corporations which appear in Sectors V, VI and VII; government business enterprises; non-profit corporations which are included in Sector II; and Canadian owned corporations abroad.

The principal source of information on the financial position of corporations is the Department of National Revenue publication *Taxation Statistics* which provides condensed balance sheets and selected revenue and expenditure items by industrial groups. The nature of this information is not perfectly suited to the needs of the National Transactions Accounts, however. The categories used in *Taxation Statistics* are insufficiently detailed to permit accurate classification into the N.T.A. categories; the figures are on a 'taxation year basis', which means that the statements of all companies filing returns for fiscal years ending between January 1 and December 31 of a calendar year are classified to that year; no information is available on valuation adjustments, and it is difficult to remove from balance sheet changes the effect of the inclusion of newly incorporated proprietorships and partnerships. The procedure actually adopted in the light of the difficulties was to make the best possible use of *Taxation Statistics* in constructing a preliminary account for this sector and then modify the results from the information contained in the category accounts. A detailed description of these two steps in the procedure follows.

The balance sheet for all fully tabulated companies in the 1954 taxation year was as follows:

1954 TAXATION YEAR

($000)

ASSETS		LIABILITIES	
Cash	1,807,616	Bank Loans	2,,206,960
Government Securities	1,043,998	Payables	3,900,451
Other Securities	3,013,155	Tax Liabilities	854,401
Receivables	5,190,249	Other Liabilities	4,308,171
Inventories	6,208,107	Funded Debt	5,785,111
Land	2,315,559	Liability Reserves	140,522
Buildings and Equipment	18,741,298	Depreciation Reserves	8,339,511
Investment in Affiliated		Capital Stock	9,976,899
Companies	5,282,319	Surplus	10,270,057
Other Assets	1,499,903	*Less*: Deficit	—679,879
Total	45,102,204	Total	45,102,204

This table illustrates the magnitude of the items involved, as presented on page 129 of *Taxation Statistics, 1956,* and lists the actual categories used there; somewhat less detail was presented in earlier years. These

totals exclude banks, insurance companies, co-operatives, Crown corporations, exempt mines and incomplete returns. They include other financial companies, such as trust and mortgage companies, investment companies and loan companies.

In order to illustrate the adjustments made in order to bring Taxation Statistics closer to the N.T.A. conceptual base, the item 'cash' is taken as an example, although the same calculations were made for all the items on the balance sheet. In 1946 and 1947, there was some variation in the method due to the lack of detail on loss companies in the financial section of *Taxation Statistics* but the approach was the same. The illustrations refer to the taxation year 1953, and the references are to *Taxation Statistics, 1955* (abbreviated as T.S. 1955).

1. *Removal of Financial Companies*

Taxation Statistics figures for fully tabulated companies already exclude banks and insurance companies. Other financial companies were excluded as follows:

	1953 ($000)
Cash — Profit companies (T.S. 1955, p. 133)	1,364,688
Less: Trust and Mortgage cos. (T.S. 1955, p. 127)	– 35,085
Loan cos. and other finance (T.S. 1955, p. 128)	– 38,337
Investment Trust and Holding Companies (T.S. 1955, p. 127)	– 47,885
Non-resident Owned Corporations (T.S. 1955, p. 127)	– 15,749
	1,227,632
Cash — Loss companies (T.S. 1955, p. 133)	197,210
Less: Trust and Mortgage cos. (T.S. 1955, p. 127)	– 88
Loan cos. and other finance (T.S. 1955, p. 128)	– 537
Investment Trust and Holding Companies (T.S. 1955, p. 127)	– 12,815
Non-resident Owned Corporations (T.S. 1955, p. 127)	– 692
	183,078

The above method was used for the years 1948 to 1954. In the years 1946 and 1947, estimates for profit companies were made as above, but estimates for loss companies were based on 1948 ratios of cash held by loss companies in each sub-group to cash of all loss companies in finance. This was necessary since details of loss companies were not published for 1946 and 1947.

2. *Change from 1952 to 1953*

Using the 1953 figures calculated above, and 1952 figures calculated in the same way, the change in cash balance was estimated.

	Profit companies	*Loss companies*
1. Cash — 1953 ($000)	1,227,632	183,078
2. Cash — 1952 ($000)	1,169,558	151,103
Change during Taxation year 1953	58,074	31,975

3. *Adjustment to Calendar Year*

The figures in *Taxation Statistics* are on a 'taxation year' basis. All companies which filed returns for fiscal years ending between January 1 and December 31 of a calendar year were classified to that year. Thus, if a company's fiscal year ended June 30, 1953, it would be classified to 1953, although half of its fiscal year fell in calendar year 1952.

In *Taxation Statistics, 1956,* Table 2 on page 80 "Allocation and Record of Income by Calendar Year" attempts to allocate profits, losses and taxes by calendar year. All companies are coded according to the month in which this fiscal year ends, and profits, losses and taxes are allocated to the previous calendar year on the basis of the number of months of their fiscal year which fell into the previous calendar year.

This approach is not very satisfactory for balance sheet items, but until quarterly balance sheet figures become available, no better one can be devised. Two of the faults might be mentioned. First, in certain industrial groups, the fiscal year ends at the time of year when activity is at a minimum, and the balance sheet of that date will not be representative of the position on December 31. Second, when a special event occurs, such as a bond issue, it will normally occur at one point of time, and should not be allocated between two years.

Following are the calculations for 1953. The percentages used appear on page 80 of *Taxation Statistics, 1956*. Changes in cash holdings of profit and loss companies for 1954 of $137.8 million and $31.4 million respectively were obtained in the same way as the 1953 estimates described above.

	Profit Companies	*Loss Companies* ($ million)	*Total*
Cash — 1953 taxation year	58.1	32.0	90.1
Amount carried back to 1952			
Profit cos. — 14.1% of $58.1 million	- 8.2		- 8.2
Loss cos. — 21.8% of $32.0 million		- 7.0	- 7.0

Amount carried back from 1954 to 1953.			
Profit cos. — 15.1% of $137.8 million	20.8		20.8
Loss cos. — 18.5% of $31.4 million		5.8	5.8
Cash — calendar year adjusted	70.7	30.8	101.5

A calendar year adjustment was made for all years except 1954, for which the necessary 1955 information was not available at the time the estimates were made.

4. *Adjustment for Coverage*

Table 1, page 82, of *Taxation Statistics, 1955,* lists the types of companies for which balance sheet data were not tabulated. These included companies filing incomplete returns, banks and insurance companies, co-operatives, Crown companies, personal corporations and exempt mines. Of these, companies filing incomplete returns, co-operatives and exempt mines should be included in Sector III. The adjustment was made for incomplete returns only, however, so that for those items not estimated from category sheets there will be undercoverage of approximately one percent.

The calculations for 1953 follow. Figures used in computing the ratios appear in *Taxation Statistics, 1955,* page 82. It was assumed that the proportion of balance sheet items covered was the same as the proportion of profits and losses covered.

$$\frac{\text{Profits of active taxable cos. excluding banks \& insurance cos.}}{\text{Profits of fully tabulated cos. excluding banks \& insurance cos.}} \times \text{cash of profit cos.}$$

$$= \frac{\$2{,}527{,}720 + 18{,}998}{2{,}527{,}720} \times \$70.7 \text{ million} = \$71.2 \text{ million}$$

$$\frac{\text{Losses of active taxable cos. excluding banks \& insurance cos.}}{\text{Losses of fully tabulated cos. excluding banks \& insurance cos.}} \times \text{cash of loss cos.}$$

$$= \frac{161{,}921 + 5{,}548}{161{,}921} \times \$30.8 \text{ million} = \$31.8 \text{ million}$$

Total cash — $71.2 million + $31.8 million = $103.0 million

5. *Adjustment for newly incorporated proprietorships and partnerships; and for concerns leaving the corporate sector.*

The estimation of transactions by calculating changes in balance sheet totals is distorted to the extent that firms are entering the corporate sector from elsewhere. An attempt was made to correct this distortion by deducting from the changes an estimate of the assets and liabilities of firms at the time of their incorporation.

The number of partnerships and proprietorships becoming incorporated during 1953 and their profits and losses are shown in Table 2, page 83 of *Taxation Statistics, 1955*. In order to estimate their total assets, a special card run of such companies was made by the Department of National Revenue for 1952, which showed newly incorporated companies grouped by size of assets at the end of their first fiscal year. By multiplying the centre point of each asset class by the number of companies in the group, an estimate of the total assets in 1952 was obtained; this benchmark was multiplied by an index based on the profits of newly incorporated companies and on the average ratio of profits to assets for all fully tabulated companies in order to obtain an estimate of the total assets of newly incorporated businesses in other years.

In order to distribute these totals of assets and liabilities among the different balance sheet items, it was assumed that newly incorporated companies could be fairly represented by the group of all companies earning from $5,000-$10,000 (See T.S. 1955 p. 134). The balance sheet of this group is available for all years, and the assets and liabilities of newly incorporated businesses were distributed in the same proportions.

A final adjustment was made to remove the increment in assets and liabilities during the first fiscal year of the new companies' existence, since the results obtained so far relate to the position at the end of that year rather than at the time of incorporation. The ratio was computed of gross saving to the sum of liability reserve, depreciation and depletion reserves, capital stock and net surplus. All items were reduced by this percentage which was about 15 percent in most years.

A similar type of adjustment, but in the opposite direction, should be made for companies leaving the corporate sector. Such cases are much rarer, however, and the largest such adjustment related to the purchase of Montreal Light, Heat and Power Company and its associated companies by the Province of Quebec, which was reflected in the 1946 calculations. No adjustment of this type was made in 1953. The amount of cash brought into the corporate sector by partnerships and proprietorships on their incorporation is estimated at $13.2 million in that year, and so the estimate of changes in corporate cash holdings was reduced from $103.0 million to $89.8 million.

6. *Adjustment for Holding Companies*

In the adjustment in section 1. above, the total of the *Taxation Statistics* industrial group "investment trust and holding companies" was deducted from Sector III. Holding companies should remain in this sector and must therefore be added back. The change in cash of the group as obtained from *Taxation Statistics* was -$7.0 million. Cash of investment trust companies, as tabulated from published figures of investment trust companies, increased by $.2 million, giving a total decline for holding companies of $7.2 million.

The figure of $89.8 million above is therefore reduced by $7.2 million giving total cash of corporations of $82.6 million.

The results of these calculations based on *Taxation Statistics* were then revised in the light of information and estimates obtained independently within the framework of the category accounts. Such revisions may be described most simply by considering each of the N.T.A. categories in turn; in some cases fuller descriptions are to be found in the notes on the various category accounts.

DEBITS

B(2). Change in Inventories: This estimate derives from the National Accounts estimate of total change in inventories, from which is deducted the estimates for Sectors II, IV and VII.

B3(a). Gross Fixed Capital Formation—Residential: 5 percent of total residential construction as reported in the National Accounts, after exclusion of the Sector VII estimate, is allocated to this sector.

B3(b). Gross Fixed Capital Formation—Non-Residential: All such expenditures not allocated to other sectors are included here.

C1(b). Currency and Bank Deposits: The estimate of cash based on *Taxation Statistics* is used, after deduction of Other Institutional Deposits. The total may reflect some offsetting of overdrafts against cash.

C1(c). Other Institutional Deposits: Certain percentages of the changes in outstanding liabilities of other financial institutions are allocated to this sector.

C2. Consumer Charge Accounts and Instalment Credit: These estimates are based on D.B.S. *Retail Credit,* and it is assumed that all credit extended by Department Stores, and 50 percent of credit extended by other retailers are assets of the corporate sector.

C4(b). Claims on Associated Enterprises — Corporate: Based on *Taxation Statistics.*

C5. Mortgages: Estimated by C.M.H.C.

C6(a). Government of Canada Bonds: Based on *Taxation Statistics.* Accrued interest may be included.

C6(b-d) and C7. Other Bonds and Stocks: The estimate for 'other securities' derived from *Taxation Statistics* is reduced by the estimate of mortgage investments. No method of allocating the total between the types of bonds and stocks has been discovered.

D(a). Transfers of Existing Assets: Based on the *Taxation Statistics* item 'land'. No information was available in 1946 and 1947.

D(b). Special Deposit and Trust Accounts: Estimated within the category account.

D(c). Recorded Receivables: Based on *Taxation Statistics* item 'receivables' after deduction of the estimates for charge and instalment receivables.

D(d). Unclassified Transactions: Based on *Taxation Statistics* item 'Other Assets'. Included are: prepaid expenses; intangibles such as franchises, patents, leases, and organization expenses; pension funds; funds in escrow; repossession funds or reserves; capital stock held for employees; trust funds; and other miscellaneous items. The detail needed to allocate these items is not available.

CREDITS

B1(a). Capital Consumption Allowances etc: The estimate used is the one given in Table 51 of the National Accounts after deduction of estimates for financial companies in Sectors V-VII.

B1(c). Other Saving: Similarly, this estimate is equal to retained earnings as published in the National Accounts, less the amounts allocated to other sectors.

B1(d). Residual Error of the National Accounts: This is the gross residual error published there — the sum of the plus and minus portions allocated to each side of the account.

C3(a). Bank Loans: These are estimated by applying certain fixed percentages to various classifications published in the Bank of Canada *Statistical Summary*. The results are broadly similar to the results derived from *Taxation Statistics;* a comparison of the two alternative estimates, and a detailed description of the method used is given in the notes on this category.

C3(b). Other Loans: This estimate is also derived from the category account and described there.

C4(b). Claims on Associated Enterprises—Corporate: No evidence on this liability can be obtained from *Taxation Statistics* because subsidiaries do not tend to distinguish between the stock and bond liabilities in the hands of parent companies and those held by the

public, and to the extent they do so in the case of bonds the liability is included in 'other liabilities'. Thus it was necessary to estimate this credit residually within the category account by deducting from total debits the credits of other sectors which could be identified. The principal components of this residual will be the net direct investment in Canadian business by non-residents and the investment in affiliated companies recorded on the asset side of this sector's account.

C5. Mortgages: Estimated by C.M.H.C.

C6(d) and C7. Other Bonds and Stocks: These credits are estimated from the statistics on net new issues of bonds and stocks published by the Bank of Canada, deductions being made from the total for the issues of other sectors.

D(c). Recorded Payables: Based on *Taxation Statistics,* the items 'payables' and 'tax liabilities' being taken together.

D(d). Unclassified Transactions: This estimate is based on the item 'other liabilities' in the *Taxation Statistics* calculation, which contains deferred income and unearned income; deposits received and trust funds; amounts owing to affiliates including funded debt; and other items. An attempt was made to remove the amounts owing to affiliates which are included in C4(b) by deducting the difference between the estimate of bonds, stocks and claims of associated companies derived from the category accounts and the estimates of capital stock and funded debt based on *Taxation Statistics.*

D(e). Residual: The amount entered here is the amount arithmetically required to balance total debits and total credits for this sector. The necessity for such an entry arises from the use of independent estimates of gross saving, capital formation, bank loans and other financial transactions rather than the estimates contained within the self-balancing system of accounts based upon *Taxation Statistics.*

SECTOR IV. GOVERNMENT ENTERPRISES

This sector includes those government owned enterprises which are deemed to fall within the business sector, except for the financial enterprises which are included in Sector V or VII. The distinction between Government business enterprises and non-commercial agencies is fully described on pages 126-7 of *National Accounts, Income and Expenditure 1926-56,* where it is stated that the distinction is made on the basis of the following criteria:

(1) Does the agency operate on a self-sustaining profit and loss basis by setting a price for its services which is calculated to cover cost?

(2) Does the agency maintain an independent accounting system which permits the charging of specific elements of cost against the revenue of the agency?

The sector is divided into Federal enterprises and Provincial and Municipal enterprises, the names of the individual enterprises included being listed in the following notes. A third subsector is included to allow certain imputed transactions in connection with government owned buildings to be recorded.

SECTOR IV (a). FEDERAL GOVERNMENT ENTERPRISES

The enterprises, and the years for which they were included in this subsector, are as follows:

Aero Timber Products	1946-1947
Canadian Arsenals	1946-1954
Dominion Arsenal — Lindsay, Ont.	1946
Dominion Arsenal — Quebec	1946
Canadian Commercial Corporation	1946-1954
Canadian Government Elevators	1946-1954
Canadian National Railways	1946-1954
Canadian National West Indies Steamships Ltd. ..	1946-1954
Canadian Overseas Telecommunications Corporation	1950-1954
Canadian Patents and Development Ltd.	1948-1954
Canadian Wheat Board	1946-1954
Canadian Wool Board Ltd.	1946
Commodity Prices Stabilization Corporation Ltd. ..	1946-1952
Eldorado Aviation Ltd.	1953-1954
Eldorado Mining and Refining Ltd.	1946-1954
Melbourne Merchandising Ltd.	1946
National Harbours Board	1946-1955
National Railways Munitions Ltd.	1946
Northern Transportation Ltd.	1946-1954
Northwest Territories Power Commission	1948-1954
Park Steamship Co. Ltd.	1946-1954
Polymer	1946-1954
Research Enterprises	1946
Small Arms Ltd.	1946
St. Lawrence Seaway Authority	1954
Trans-Canada Airlines	1946-1955
Wartime Food Corporation	1946

Sources of information on these companies are their Annual Reports, and the *Public Accounts;* in recent years, the accounts of the Crown Companies have been conveniently segregated in Volume II of the *Public Accounts.*

In order to illustrate the classification of the balance sheet headings, the coding of the C.N.R. was as follows:

C.N.R. Balance Sheet Headings with N.T.A. Coding

ASSETS	N.T.A. Category Code
Investment:	
Road & equipment property	B 3 (b)
Improvements on leased property	B 3 (b)
Miscellaneous physical property	B 3 (b)
Sinking fund assets Capital & other reserve fund assets Deferred maintenance fund assets	C 6
Investment in affiliated companies	C 4 (c)
Other investments	C 6 (a)
Current Assets:	
Cash	C 1 (b)
Temporary Cash Investments	C 6 (a)
Special Deposits	D (b)
Net balances receivable — agents	D (c)
Miscellaneous a/c receivable	D (c)
T.C.A. advances	C 4 (c)
Government of Canada — due on deficit a/c	C 4 (c) contra*
Material and supplies	B 2
Interest & Dividends receivable	D (c)
Accrued a/c receivable	D (c)
Other current assets	D (d)
Deferred Assets:	
Working capital advances	D (c)
Insurance fund assets	C 6
Pension fund assets	OMIT **
Other deferred assets	D (d)
Unadjusted Debits:	
Prepayments	D (c)
Discount on funded debt	C 6 (a) contra*
Other unadjusted debits	D (d)

* "Contra" means that the item is classified as a credit rather than a debit in the N.T.A.; it is treated as a decrease in liabilities rather than an increase in assets.

** Both these assets and the corresponding liability are omitted.

LIABILITIES

Funded debt	C 6 (a)
Gov't of Canada — Loans & debentures	C 4 (c)
Current Liabilities:	
Traffic & car service balances	D (c)
Audited a/c and wages payable	D (c)
Miscellaneous a/c payable	D (c)
Gov't of Canada — Interest payable	C 4 (c)
Gov't of Canada — Balance due on deficit account	C 4 (c)
Interest due and unpaid — public	D (c)
Unmatured interest accrued	D (c)
Accrued a/c payable	D (c)
Taxes accrued	D (c)
Other current liabilities	D (d)
Deferred Liabilities:	
Pension liability	OMIT
Other deferred liabilities	D (d)
Reserves & unadjusted credits:	
Insurance reserve	C 4 (c)
Accrued depreciation — Can. lines	B 1 (a)
Accrued depreciation — U.S. lines	B 1 (a)
Accrued amortization, defence projects	B 1 (a)
Deferred maintenance reserve	C 4 (c)
Other reserves	C 4 (c)
Unadjusted credits	D (d)
Capital stock of subsidiaries, held by public	C 7
Government of Canada, shareholders a/c	
6 million N.P.V. shares (C.N.R. & C.N.S.T.)	C 4 (c)
Preferred shares	C 4 (c)
Capital investment of Gov't of Canada in Canadian Gov't railways	C 4 (c)

Certain valuation adjustments were made in calculating the transactions of this subsector, of which the most important were to fixed capital assets. Adjustments were made first for the profits on the sale of vessels by Canadian National West Indies Steamships, and for the revaluation of the assets of National Harbours Board in 1952. Further adjustments were made both to fixed investment and to depreciation in order to make them consistent with the National Accounts estimates, as explained in the category accounts, and the difference between the amount added

to changes in fixed capital and the amount added to depreciation was classified as sales of existing assets.

The Canadian Wheat Board is a special case. Most of these enterprises report on a calendar year basis, but the Canadian Wheat Board's fiscal year ends on July 31st, and thus its published reports are less useful. Another difficulty is the separation of the Wheat Board from the private companies and co-operatives which act as its agents; it is assumed that all stocks of grain are owned by the Board, and thus its inventories are based on the National Accounts estimate of 'Grain in Commercial Channels', while any grain physically in the hands of the agents and not yet paid for is represented by an amount due to the agents. The Wheat Board is also an exception to the rule that government enterprises can retain no earnings. The earnings of the Board can hardly be classified as owing to the government since they really accrue to the farmers, but they are not counted as part of their current accrued net income. Thus the National Accounts item 'Adjustment on Grain Transactions' is entered as other saving.

SECTOR IV (b). PROVINCIAL AND MUNICIPAL GOVERNMENT ENTERPRISES

1. *Provincial*

The following provincial business enterprises are included:

Newfoundland

Board of Liquor Control (1949-1954)
Division of Northern Labrador Affairs (1949-1954)
Federal-Provincial Housing Projects (1951-1954)

Prince Edward Island

Prince Edward Island Temperance Commission (1946-1954)
School Supply Branch (1946-1954)

Nova Scotia

Nova Scotia Power Commission (1946-1954)
Nova Scotia Liquor Commission (1946-1954)

New Brunswick

New Brunswick Electric Power Commission (1946-1954)
Liquor Control Board (1946-1954)

Quebec

Quebec Sugar Refinery (1946-1954)
Quebec Liquor Commission (1946-1954)
Quebec Hydro-Electric Commission (1946-1954)
Beauharnois Light, Heat and Power Company (1946-1951)
Upper Ottawa River Hydro-Electric Plant (1946-1949)

Ontario

- Hydro-Electric Power Commission of Ontario
  - Southern System (1946-1954)
  - Northern Ontario Properties (1946-1954)
- Liquor Control Board of Ontario (1946-1954)
- Niagara Parks Commission (1946-1954)
- Ontario Northland Transportation Commission (1946-1954)
- Ontario Research Foundation (1946-1954)

Manitoba

- Government Liquor Control Commission (1946-1954)
- Manitoba Text Book Bureau (1946-1954)
- Manitoba Power Commission (1946-1954)
- Manitoba Telephone Commission (1946-1954)
- Manitoba Hydro-Electric Board (1951-1954)
- Winnipeg Electric Company and Subsidiary Companies (1952)

Saskatchewan

- Province of Saskatchewan Liquor Board (1946-1954)
- Saskatchewan Government Telephones (1947-1954)
- Saskatchewan Power Corporation (1946-1954)
- Saskatchewan Forest Products
  - Big River Mill Division (1950-1952)
  - Timber Board Division (1950-1954)
  - Box Factory Division (1950-1953)
  - Wood Enterprises Division (1954)
- Saskatchewan Reconstruction Corporation (1950)
- Saskatchewan Wool Products (1950-1953)
- Saskatchewan Government Printing Company (1950-1954)
- Saskatchewan Government Airways (1950-1954)
- Saskatchewan Minerals
  - Sodium Sulphate Division (1950-1954)
  - Clay Products Division (1950-1954)
- Saskatchewan Transportation Company (1950-1954)
- Government Finance Office (1949-1954)
- Saskatchewan Marketing Services
  - Government Trading Division (1950-1954)
  - Fish Marketing Service Division (1950-1954)
  - Fur Marketing Service Division (1950-1954)

Alberta

- Alberta Government Telephones (1946-1954)
- Public Works Stock Advance (1946-1954)
- School Book Branch (1946-1954)
- Queen's Printer's Advance (1946-1954)
- Highways' Stock Advance (1950-1954)

Liquor Control Board (1946-1954)
St. Mary and Milk Rivers Development (1946-1954)
Marketing Services Limited (1946-1954)
Prairie Woollen Mills (1949-1954)
Cream Grading (1946-1951)
Insurance Office (1946-1948)

British Columbia

Liquor Control Board (1946-1954)
Pacific Great Eastern Railway (1946-1954)
British Columbia Power Commission (1946-1954)

Information is derived from the annual reports of the companies, from the *Public Accounts* of the provinces and from the annual reports on Saskatchewan Crown Corporations. Certain enterprises for which no balance sheets could be found were omitted, but these are relatively small. Certain Saskatchewan companies are only included from 1950 on, due to the lack of data for earlier years. Not all enterprises report on a calendar year basis, so it was necessary to accept the data for the fiscal year closest to the calendar year. In the case of funded debt, however, it was possible to adjust more closely to a calendar year basis by means of data on issues and retirements.

Little detail is available on the investments of these enterprises, and estimation on the basis of incomplete data was necessary.

The issues of bonds by the Ontario Hydro-Electric Power Commission directly to the Province of Ontario in 1951, 1952 and 1953 were classified as claims on associated enterprises rather than bonds. An adjustment was made to remove the effect of the writedown of much of the debt of the Pacific Great Eastern Railway to the British Columbia government in 1953.

The Quebec Hydro-Electric Power Commission was formed in April 1944 when the Montreal Light, Heat and Power Company and its subsidiaries were purchased by the Province of Quebec. In the same year, the outstanding capital stock of Beauharnois Light, Heat and Power Company was also purchased, and its reports were contained in Quebec Hydro's Annual Report but were not consolidated until 1953. Not all the bonds and stocks of the predecessor companies were redeemed immediately, and the gradual process of redemption is reflected in the negative credits under the categories C6(d), Other Bonds, and C7, Stocks.

The Hydro-Electric Plant — Upper Ottawa River which predated the Quebec Hydro-Electric Power Commission was treated by the Province of Quebec as part of its general operations. In 1950, it was purchased by Quebec Hydro and included in the consolidated balance sheet; prior to that date, its assets were included in this sector rather than in the Provincial Government Sector, and an imputed entry equal to its assets

entered in category C4(c), in the credits of this sector and in the debits of Sector IX.

The Manitoba Hydro-Electric Board was formed in 1951 to assume responsibility for ensuring that power generating facilities in Manitoba would be adequate to meet the growing demand for electricity. Soon after its formation the Province of Manitoba transferred to it the Pine Falls Power Development which was in the process of being built by the Province. In January 1953, the Manitoba Hydro-Electric Board acquired the electrical power business of the Winnipeg Electric Company. Adjustments were made to Sectors III and IV comparable to those made in the case of Montreal Light Heat and Power.

2. *Municipal*

Only certain of the larger municipal enterprises have been completely enumerated: Toronto Transportation Commission, Ottawa Transportation Commission, Winnipeg Transit Company, and Municipal hydro-electric companies operating under Ontario Hydro. For these, complete balance sheets have been obtained from annual reports. The only information obtained on other enterprises was the amount of their funded debt, which is recorded in D.B.S. *Financial Statistics of Municipal Governments,* supplementary information also being obtained from the records of new issues and retirements published in the Bank of Canada *Statistical Summary.* Three-quarters of this funded debt was accounted for by municipal waterworks, the remainder being the liability of telephone systems, housing projects, airports, electric light and power companies and transit systems. For all these enterprises, the change in the funded debt is entered as a credit, and an equal debit entered under gross fixed capital formation. All other transactions remain within the Municipal Government Sector.

SECTOR IV (c). THE OPERATION OF GOVERNMENT BUILDINGS

One of the conceptual changes introduced in the recent revision of the National Accounts affected the treatment of government buildings. These buildings are now deemed to be operated by a business agency, to which the governments pay gross rents and from which the governments receive in turn net rents. The difference between gross and net rents is depreciation on government buildings, which is retained by the business agency. Thus depreciation — or capital consumption allowances as it is now more correctly termed — for the business sector is increased by the amount of this imputed depreciation on government buildings, and the government surplus is reduced by the same amount. This subsector is established in the National Transactions Accounts as a place in which to record the amount of this depreciation, which is offset by an equal negative credit in the category C4 (c), Claims on Associated Enterprise, government. The contra entry in this category appears in the debits of the government sectors, and thus balances the reduction in their saving.

SECTOR V. BANKING

The Bank of Canada, the chartered banks and the Exchange Fund make up this sector. The inclusion of the Exchange Fund with the banking system is not wholly satisfactory, as was noted in the introduction.

SECTOR V (a). BANK OF CANADA

The balance sheets of the Bank of Canada are to be found in its *Annual Report* and *Statistical Summary.*

Government of Canada deposits at the Bank of Canada are adjusted to exclude profits payable which are classified as C4 (c). Foreign currency deposits of the Government were not shown prior to 1949 and are treated as agency transactions and omitted. Adjustments have been made for the revaluation of foreign currency items and for depreciation, the latter being taken from the statement of income and expenditure published on page 733 of the *Proceedings of the Standing Committee on Banking and Commerce* on the decennial revision of the Bank Act, 1954.

SECTOR V (b). EXCHANGE FUND

Information on the activities of the Exchange Fund has been obtained from the annual reports of the Foreign Exchange Control Board, the *Public Accounts* (from 1952 on) and from the Bank of Canada.

The foreign currency assets of the Exchange Fund which consist of gold, short-term securities of the U.S. government and deposits at the Bank of Canada, are subject to revaluation when the exchange rate changes, and the changes in their book value have to be adjusted to eliminate the effects of such writeups and writedowns. The total amount of the adjustment is equal to the change in the 'deficit due to revaluation' less the change in the 'reserves against outstanding future contracts'. The allocation of the total to the various asset items is discussed more fully in connection with the official holdings of foreign currency assets in the notes on the Rest of the World.

SECTOR V (c). CHARTERED BANKS

Although a great deal of information is available on the ten chartered banks in existence during the period, considerable difficulties were encountered in constructing this account. The basic source of information is the monthly return to the Minister of Finance, published in the *Canada Gazette,* from which the monthly 'banking statistics' in the Bank of Canada *Statistical Summary* are compiled. But this, and supplementary information published in the *Statistical Summary,* refer to the operations of the chartered banks, including the operations of their foreign branches. These have to be considered as non-resident institutions rather than as Canadian transactors. Such transactions as loans made by branches in the West Indies

to their local clients should not be included in the National Transactions Accounts for Canada; instead the transactions between the foreign branches and Canadian offices, especially the bank head offices, should be included. An attempt must therefore be made to construct accounts for the foreign branches from unpublished information and deduct them from the published accounts. A problem of reconciliation with the balance of payments also arises, and is discussed in the notes on Sector XI. A further problem arises in 1949 when the Newfoundland branches cease to be foreign and become Canadian; again, some estimate had to be made of the magnitudes involved and the coverage adjusted.

The classification of the items reported on the balance sheet also presents some special problems. The bank float entry 'Items in transit', which may be subdivided into 'Canadian dollar items in transit' and 'Net foreign items in transit', from supplementary data recorded in the *Statistical Summary,* is deducted from reported deposits, in accordance with the treatment outlined on page 491. 'Acceptances, guarantees and letters of credit' being contingent assets and liabilities, are omitted from both sides of the accounts. Some additional breakdown of the reported item 'other assets' is needed for proper classification. The amount of accrued Federal tax was included in Government deposits in the published figures, and some rough estimate of the amounts involved are made in order to remove it from that category and include it in payables.

When the banks raise new share capital, only the par value of the issue is credited to 'Capital paid up', and the excess is credited to 'Rest Account'. This treatment is revised, so that all the proceeds appear as a credit in category C7.

Real Estate, shown after depreciation, was adjusted to a gross basis. Even then the result is not consistent (for the Banking Sector as a whole) with the series included in the estimate of Gross Domestic Investment published in *Private and Public Investment in Canada* and a further adjustment is made to bring it into line with that source. The *contra* entry (again for the Banking Sector in toto) is made to transactions in existing assets. This is far from being completely correct, but it does represent some of the largest differences correctly — those resulting from transfers of real estate to subsidiaries established for the purpose.

The balance sheets of the banks reflect not only transactions of the type that these accounts attempt to record but also valuation adjustments of great magnitude. On the one hand, the various foreign currency assets and liabilities are subject to evaluation on account of changes in the exchange rate, and rough estimates of the amounts involved have been made and the balance sheet changes adjusted accordingly. On the other, the more important asset items are published after deduction of certain reserves. While the total amount of these reserves is not published, a series entitled

'Provision for losses and addition to reserves' can be found in the statement of 'Earnings, Expenses and Changes in Shareholders' Equity published on a fiscal year basis in the Bank of Canada *Statistical Summary*. The distribution of this transfer by types of assets affected, presents considerable difficulties however. Estimates of the holdings of Government of Canada direct and guaranteed securities at par value have been published (See page 34 of the *Bank of Canada Statistical Summary, Financial Supplement 1956;* this series has been used to derive changes in 1953 and 1954, when changes in par value are clearly better approximations to transactions value than the changes in the balance sheet valuations. In these two years the balance of the provision for losses and addition to reserves, after deduction of the foreign currency adjustments and the implied adjustment on Government of Canada bonds, is applied to the loan category. In all other years, the excess of the transfer over the foreign currency adjustments was not allocated and appears in the residual.

SECTOR VI. LIFE INSURANCE

Three subsectors are included here: the Canadian transactions of Canadian companies operating under federal registration; the operations of provincially licensed companies; and the Canadian transactions of British and foreign companies. The principal sources of data are the *Reports of the Superintendent of Insurance for Canada,* hereinafter described as the Insurance Reports.

Before discussing these subsectors in detail, some general comments may be useful on the unique features of the life insurance business which demand special treatment in the national accounting framework. Life insurance companies perform two roles which must necessarily be combined; they provide an insurance service, and in the course of so doing, they receive a very substantial portion of the flow of personal saving and invest it in earning assets. In the national income and expenditure accounts, life insurance companies are deemed to act as agents for their policyholders. The services of insurance and investment of savings which they perform on behalf of their policyholders are regarded as equivalent to the expenses they incur and the profits they make, policyholders being deemed to pay a fee which covers these expenses and profits. The interest, dividends and net rents earned on the investments in the companies' portfolios are collected by the companies but are treated as income accruing to the policyholders. The excess of this income which policyholders are deemed to receive over the fees which they are deemed to pay is then viewed as flowing back into the companies' hands in the form of imputed premiums. Thus the flow of funds from policyholders to life insurance companies consists of the following elements: the imputed fee for insurance and investment services, which is included in consumer expenditure; and cash premiums paid plus imputed premiums which are financial transactions. The reverse flow from companies to policyholders consists of the investment income collected by the

companies as the policyholders' agents which enters personal income, and the claims paid which are financial transactions. All of the financial transactions are combined in the National Transactions Accounts into a single net flow which may be called policyholders' saving and is included in Category C8 — Insurance and Pensions. It is equal to cash premiums less claims, plus imputed premiums; such imputed premiums being equal to investment income less expenses and profits of the companies.

These concepts may be illustrated from the following example of a simplified income and expenditure statement of a life insurance company:

Cash premiums received	240		
Less claims paid	-180		
Net premiums received		60	
Interest, dividends and rents		80	
Total			140
General expenses and taxes		45	
Dividends paid to shareholders		1	
Depreciation		1	
Retained earnings		1	
Balance: policyholders' saving		92	
Total			140

The general expenses and profits of the company which are taken as a measure of its services and for which a fee is imputed in personal expenditure amounts to 48. Policyholders' saving equals 92, and this equals net cash premiums of 60 plus imputed premiums of 32, the difference between investment income 80 which is imputed to the policyholder and the fee of 48. Gross company saving equals depreciation of 1 and retained earnings of 1.

In the National Transactions Accounts, the current revenues and expenditures of life insurance companies are not presented separately in the main tables, since their current transactions are included in the totals for the Business Sector as a whole. A calculation of policyholders' saving entrusted to the life insurance industry is necessary, however, since this is considered to be a financial transaction; furthermore some estimate is required of depreciation and retained earnings for the B Account. Theoretically all these could be estimated from the balance sheet, insofar as policyholders' saving is represented by changes in the actuarial reserves and insurance surplus, retained earnings by changes in the shareholders' surplus account and depreciation by changes in depreciation reserves. More accurate measurement of these flows may be derived, however, from the detailed statements of income and expenditure presented in the Insurance

Reports. The following table is a by-product of the measurement of policyholders' saving, and contains an account of the current non-financial transactions, actual and imputed, for the Life Insurance Sector as a whole, which may be of interest to some users of the National Transactions Accounts.

NON-FINANCIAL TRANSACTIONS OF THE LIFE INSURANCE SECTOR
(*millions of dollars*)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Interest and dividends received	106.1	108.5	114.2	127.4	138.9	152.3	169.6	186.7	208.4
Gross rents received	4.2	4.6	5.4	5.6	6.8	8.4	10.6	12.7	14.2
Imputed fees for services rendered to policy-holders	93.2	102.6	111.0	119.4	131.6	145.8	157.1	169.8	178.4
Services performed for foreign branches	5.0	5.6	9.4	7.0	9.9	7.1	8.3	8.9	9.1
Total	208.5	221.3	240.0	259.4	287.2	313.6	345.6	378.1	410.1
Imputed payments of investment income to policyholders	100.6	103.9	110.0	123.1	135.8	149.2	165.9	183.1	205.6
Investment income transferred to foreign branches	5.7	4.9	6.9	4.9	6.8	4.9	6.4	8.6	9.0
General expenses	87.1	95.3	104.1	109.7	120.5	129.9	144.8	153.6	163.8
Services provided to Canadian branches	4.8	5.9	6.8	7.7	8.9	11.8	11.7	12.2	13.1
Taxes	7.3	8.6	9.0	10.3	10.7	12.6	11.8	14.1	12.6
Dividends paid to shareholders	1.4	2.2	1.6	1.9	2.0	3.0	2.4	2.5	2.5
Depreciation	1.3	1.1	1.5	1.4	1.6	2.5	2.3	3.3	2.5
Retained earnings	.3	— .6	.1	.4	.9	— .3	.3	.7	1.0
Total	208.5	221.3	240.0	259.4	287.2	313.6	345.6	378.1	410.1

Certain technical points in connection with the processing of the receipts and disbursements accounts should be commented upon.

(1) *Transactions between Head Offices and Branches*

It will be noted that certain transactions between head offices and branches, when one or the other is not in Canada, appear in the table above. These arise from the inclusion in the sector of the Canadian operations of British and foreign companies and the exclusion of the out of Canada operations of Canadian companies.

(2) *Investment Income on Shareholders' Funds*

In fact, not all the investments of life insurance companies are held on policyholders' accounts; some represent the investment of accumulating shareholders' funds. The income from such investment is not included in the amount imputed as accruing to policyholders, and it is deducted from the expenses and profits of the companies in estimating the

value of the service rendered by them. Policyholders' saving is not affected by this adjustment.

(3) *The Treatment of Rents*

It is necessary to distinguish between gross and net rents, gross rents being the amounts paid by the tenant for an economic service while net rents represent the 'profit' made by the landlord, being in this case gross rents, less depreciation, real estate taxes and expenses including repair expenditures. In calculating policyholders' saving, gross rents should be included in the gross revenues of the life insurance companies, but net rents in the investment income imputed as accruing to the policyholders.

In the Insurance Reports for 1946-53, rents are largely on a net basis, real estate taxes, expenses and repairs and some part of depreciation being deducted. These are added back to arrive at gross rents, and also added to the disbursement side of the accounts. The total of real estate taxes plus depreciation was subdivided in the proportions derived from the 1954 statements.

Three types of depreciation were distinguished:

(a) Depreciation on property 'for the production of income'.

(b) Regular writeoffs of other real estate.

(c) Irregular writeoffs of other real estate.

In the Insurance Reports for 1946-53, rent is shown after deduction of (a) but not (b) or (c), these appearing in the writedowns noted in the synopsis of ledger accounts. In the 1954 Report, rent is shown before deduction of any of these types; (a) and (b) are recorded as 'regular annual depreciation' and (c) as a writedown in the Reconciliation of Surplus Account. In the calculation of gross rents, all these types are included, but while all three are omitted from net rents in 1946-53, only (a) and (b) are omitted in 1954, rendering it slightly 'grosser' than in the earlier years.

It may be noted that other investment income is calculated on a gross basis throughout. In 1954, investment expenses were added back in when receipts of interest and dividends were reported on a net basis for the first time.

(4) *Cash Versus Accrual Accounting*

Revenues and expenditures are reported on a cash basis in the Insurance Reports from 1946 to 1953 and on an accrual basis thereafter. As far as possible, they are converted to an accrual basis in the earlier years in order to conform to the conceptual framework of the National Transactions Accounts. Thus investment income is increased by the increase in amounts due and accrued, while the amortization of premiums and discounts are excluded. Expenses and taxes are similarly

adjusted. Premiums and other receipts from policyholders are estimated on an accruals basis throughout, but disbursements to policyholders are left on a cash basis in 1946-53 and adjusted to a cash basis in 1954.

(5) *Valuation Adjustment*

Profits and losses from the sale of investments, and amounts by which assets were written up or down are excluded from the revenue and expenditure accounts. Thus policyholders' saving is calculated without including valuation adjustments. These adjustments, however, have their place in the accounting system in adjusting the changes in the book value of assets to a transactions basis.

(6) *Amounts Deposited with the Company*

Amounts currently deposited with the company are treated as analogous to premiums, and deposits currently withdrawn as analogous to claims. Interest credited to amounts on deposit is treated in the same way. Interest paid on unpaid claims is also treated as analogous to claims.

(7) *Staff Pension and Insurance Funds*

Certain problems arise in connection with the pension and insurance funds of the company's own employees. In some cases these funds are independent of the company's own accounts, which reflect the payments of the employer's contributions to the fund; but in other cases, the company's own accounts include either explicitly or implicitly the assets, liabilities and current transactions of the staff funds. Where the funds are independently administered they are treated in the same way as the independent pension funds of other groups of employees, that is they remain as part of the consumer sector because of the lack of adequate sources of information which would permit their segregation. But where the pension funds are administered by the company and included in the company's accounts, the staff are treated as policyholders insofar as their pension and insurance interests are concerned. Payments into the fund are classified as premiums and payments out of the fund as claims.

In addition, special reserves for pensions are encountered. For example, Sun Life built up in its liabilities a 'Reserve for Staff Pension Fund' which amounted to more than $24 million by the end of 1950. In 1951, a staff pension plan was initiated and more than $17 million was paid out of this reserve to the Pension Fund Society and Trustees of U. S. Staff Pension Plans as 'accrued contributions on account of past service'. Such special reserves were treated as if they were pension funds of the type which is not independent, their increase being treated as payments of employers' contributions and as receipts of premiums. The payment of accrued contributions out of such a reserve to an independent pension fund then reduces policyholders' saving and would increase saving entrusted to independent pension funds by an equal amount, if this were separately recorded.

SECTOR VI (a). CANADIAN FEDERAL COMPANIES

At the end of 1952, 31 Canadian life insurance companies possessed total admitted assets of $5,207 million according to the balance sheets appearing on pages 24a-27a of the Abstract of Statements contained in the Insurance Report for that year. From such balance sheets as this, and from supporting information to be found elsewhere in the Insurance Reports, the total investment and financial transactions of these companies may be derived. Particular reference should be made to the detailed statements of purchases and sales of real estate, bonds and stocks, and of transactions in connection with mortgages, policy loans, etc. which appear in Appendix E of the 1952 Report, and similarly for other years. This information is quite unique, and permits both an exact classification of transactions and their measurement at transaction value — this differing from the change in book values by the amount of valuation adjustments.

The Canadian life insurance industry does not confine its activities to Canada, however, but carries on a very substantial business in foreign countries. The question arises whether the operations of such foreign branches of Canadian companies should be included in the National Transactions Accounts. In fact, the Balance of Payments defines the foreign branches as non-resident and includes transactions between the Canadian Head Office and the foreign branches, not the transactions between the foreign branches and their clients; a convention very similar to the treatment of the chartered banks. In both the life insurance and the chartered bank cases, the National Transactions Accounts follows the same convention and is thus consistent with the Balance of Payments.

In the reported statements so far discussed, however, and in the supplementary table attached which contains estimates of all transactions of Canadian federal companies, transactions of the foreign branches are included and some estimate of their magnitude must be made in order to exclude them. Fortunately the following types of 'out of Canada' data are included in the individual company statements.

Net premium income and considerations for annuities.

Net disbursements under insurance and annuity contracts.

Assets and liabilities in detail (except for the classification of bonds).

With this information, a considerable proportion of total transactions can be divided between operations in Canada and out of Canada, and the remainder was divided in the following ways.

1. Investment Income. Investment income received is divided in the ratio of earning assets in Canada and out of Canada. Imputed investment income paid is subdivided in the ratio of liabilities to policyholders. Any difference between receipts and imputed payments is treated as investment income passing between Head Office and foreign branches.

2. Head Office expenses are distributed in the ratio of gross insurance in force plus ten times the new insurance effected on the assumption that ten times the resources are required to write new insurance as to maintain an equivalent amount of outstanding insurance.

3. The imputed service to policyholders is distributed in the same way as Head Office expenses.

4. The Shareholders' Accounts were treated as wholly Canadian.

5. The foreign currency rate adjustments were assumed to apply wholly to out of Canada transactions.

6. Transactions in Bonds were allocated on a currency of payment basis. For Government of Canada, Provincial and Municipal bonds, purchases and sales were allocated to Canadian or foreign business on the basis of whether they were payable in Canadian dollars or in foreign currencies. The amounts for which the currency of payment was not specified were allocated in the same proportion as those for which the currency of payment was known. Transactions in other bonds were allocated residually by deducting the estimates for government bonds from the estimates of total bond transactions.

7. After all the various items relevant to the financial transactions account have been allocated to Canadian operations and foreign operations respectively, a balancing item appears in each account. This is defined as the net investment of Head Office in the foreign branches, and is classified to the category C4(b), appearing as a debit in the Canadian transactions account, and as a corresponding credit in the foreign branches account, and thus eventually in Sector XI, the Rest of the World.

Adjustment for New Entrants

Three companies became Dominion registered life companies during the period 1946-54:

Co-operative Life Insurance Company — from Saskatchewan registry in 1947.

Alliance Nationale — A Fraternal Benefit Society in 1948.

The Life Insurance Company of Alberta — from Alberta registry in 1951.

Where financial transactions were estimated from changes in balance sheet entries, an adjustment was necessary to exclude the assets and liabilities of these companies at the time of their entry. For the first of the above companies, a direct estimate of the increment in assets and liabilities in 1947 was based on the reported increments in ledger assets during the year, and on policyholders' and company savings. Opening balance sheets for Alliance Nationale and for the Life Insurance Company of Alberta were found in the Fraternal Benefit Societies Report and the Report of the Superintendent of Insurance for Alberta respectively.

SECTOR VI (b). PROVINCIAL COMPANIES

Not all life insurance in Canada is written by companies which are Dominion registered, and thus fully documented in the Insurance Reports, although they are responsible for a very large proportion of the total. The business of companies operating under provincial licence, while considerable in absolute amount, is smaller in relative terms. The Insurance Reports do contain some data on these companies, in the table on total life insurance in Canada, which appears for example on page 123a of the 1952 Report. From this table it will be seen that Provincially registered life companies in that year received net premiums of approximately $16 million or 4 percent of the total for Dominion registered companies, and paid net claims of $5 million, approximately the same percentage. The time not being available to exhaust other sources of information on provincially licensed companies, an estimate of their transactions was made by applying premium-claim ratios to the transactions account for Canadian companies under Federal registration.

SECTOR VI (c). BRITISH AND FOREIGN COMPANIES

Just as Canadian companies do much business in foreign countries, a number of British and foreign companies do business in Canada. For the same reason that the foreign operations of Canadian companies were excluded from these accounts, the Canadian operations of these foreign companies must be included. At the end of 1952, 41 such companies had total liabilities in Canada of over $1.1 billion.

The Insurance Reports contain information on these Canadian operations, and the accounts were prepared in the same or analogous ways as for Canadian companies. In some cases, however, the data are not available in the same detail, and new methods of estimation had to be devised to circumvent this difficulty. The important innovations in method were as follows:

1. It was assumed that certain expenses of the foreign head offices were incurred on behalf of Canadian policyholders. These expenses were assumed to bear the same relationship to all other expenses as in the case of Canadian companies in the same year.
2. Depreciation of real estate was assumed to be the same proportion of real estate assets for both Canadian and foreign companies; the amount of depreciation thus estimated is the sole component of gross saving in Canada of foreign companies.
3. In estimating policyholders' saving, company profits were assumed to bear the same relationship to policyholders' saving as in the Canadian companies in the same year.
4. The balancing item in the current account was treated as apparent profit after taxes accruing to Head Office.

5. Before 1954, the problem of estimating the transactions in stocks and bonds is complicated by the absence of data either on purchases and sales or alternatively on capital gains and losses, writeups and writedowns. A rough correction of the changes in the balance sheet assets was therefore made by assuming that net trading losses and writedowns affected balance sheet values to the same degree as in a sample of Canadian companies.

6. The breakdown of bond holdings was not given at the end of 1945, and therefore the total increment in bond holdings in 1946 was distributed between Government of Canada, Provincial and Municipal bonds in the same proportions as these increments were distributed in the Canadian companies.

SECTOR VII. OTHER FINANCIAL INSTITUTIONS

Financial intermediaries other than banks and life insurance companies are included in this sector. 13 groups were separately tabulated:

(a) Quebec Savings Banks
(b) Credit Unions
(c) Government Savings Institutions
(d) Trust Companies
(e) Mortgage Loan Companies
(f) Central Mortgage and Housing Corporation
(g) Other Government Lending Institutions
(h) Instalment Finance Companies
(i) Small Loan Companies and Licensed Money Lenders
(j) Investment Companies
(k) Fire and Casualty Insurance
(l) Fraternal Benefit Societies
(m) Government Insurance Institutions.

Certain financial institutions are not included here, due principally to the lack of information. Self administered or trusteed pension funds are probably the most important institutions excluded; other enterprises defined as financial in the Standard Industrial Classification and not included in this sector are holding companies, stock, bond and commodity dealers, insurance agents, real estate operation and real estate agents. To the extent that these financial transactions are incorporated, they fall within Sector III; otherwise, they fall in Sectors I and II.

SECTOR VII (a). QUEBEC SAVINGS BANKS

Included in this subsector are the Montreal District Savings Bank and La Banque d'Economie de Quebec. The data are taken from the "Statement of Assets and Liabilities of the Quebec Savings Banks" in the *Canada Gazette*.

Prior to 1948, holdings of Government of Canada and Provincial securities were not distinguished. The estimate for the earlier period is therefore based on incomplete information.

Depreciation was estimated as 5 percent of the value of premises at the beginning of the year, the figure for "other new fixed capital" being adjusted accordingly.

SECTOR VII (b). CREDIT UNIONS

This subsector includes Credit Unions and Caisses Populaires, and also the various central societies and federations within the credit union movement.

The main source of information is the annual publication of the Federal Department of Agriculture entitled *Credit Unions in Canada.* Here may be found complete balance sheet data from 1947 on — see for example Table 9, p. 17 in the 1954 publication.

This material is compiled from provincial totals which are fairly comprehensive, but suffer from certain defects:

1. The data combine statements of individual credit unions at various fiscal year ends.
2. No detail on the composition of investments is provided. The breakdown of investments is consequently based on the following arbitrary percentages:

Government of Canada Securities ..	40%
Provincial Securities	30%
Municipal Securities	15%
Other Securities	15%

3. The figures for loans and mortgages provided by the main source are not usable, since credit unions in some provinces report a combined figure for the two items. C.M.H.C. has made estimates of mortgage loans outstanding for 1951-1954, however, on the basis of which a more accurate separation was made for those years and projected backward to the earlier years.
4. Depreciation figures were not provided, but were estimated as 5 percent of fixed assets.

Before 1947, only shares and deposits information is available, so the rest of the account was constructed from the balance sheet published in *Caisses Populaires* by the Quebec Bureau of Statistics. This entailed extrapolation of minor items.

SECTOR VII (c). GOVERNMENT SAVINGS INSTITUTIONS

"Government Savings Institutions" include the Post Office Savings Bank, the Alberta Treasury branches, the Province of Ontario Savings Office, and the Newfoundland Savings Bank (since 1949).

This account is derived from balance sheet data published in the *Public Accounts* of the Government of Canada and the respective Provinces. These balance sheets are on the basis of a fiscal year ending March 31. For the purposes of the National Transactions Accounts, this fiscal year is assumed to be equivalent to the calendar year ending the previous December 31.

The deposit liabilities of these institutions are classified as "other institutional deposits", as are the drafts, money orders, and postal orders outstanding.

The Post Office Savings Bank and the Province of Ontario Savings Office place their funds in the hands of the Receiver General and the Provincial Treasurer, respectively. These funds have been classified as "Special Deposits and Trust Accounts".

SECTOR VII (d). TRUST COMPANIES

Included in this subsector are those trust companies whose statements appear in the following reports:

> Report of the Superintendent of Insurance for Canada: Loan and Trust Companies.
>
> Report of the Ontario Registrar of Loan and Trust Corporations.
>
> Summary of Financial Statements filed within the office of the Inspector of Trust Companies for the Province of Quebec.

The number of companies covered declined from fifty-one in 1946 to forty-three in 1954 because of mergers and dissolutions, while no new companies were established during the period. The assets of companies not covered are believed to be relatively small.

These trust companies distinguish between three types of funds: Company Funds, Guaranteed Funds and Estates Trust and Agency Funds (funds under administration). Company Funds include proceeds from the capital stock of the company and retained earnings. Guaranteed Funds result from the acceptance of deposits from the public and also from the sale of non-marketable investment certificates of different maturities; all these Guaranteed Fund liabilities are classified in the National Transactions Accounts as Other Institutional Deposits. No distinction is made in the Accounts between assets purchased with Company Funds and those

purchased with Guaranteed Funds. The handling of Estates Trust and Agency Funds is the main activity of these companies, but since such transactions are undertaken on behalf of others, both the liability and the assets earmarked against it are omitted from this account.

Valuation adjustments are impossible to calculate precisely, since the published accounts do not record all the necessary data. Transfers to and from reserves and surplus have been combined with writeups or writedowns and capital gains or losses, and this total then compared with the sum of *changes* in reserves and surplus as shown on the balance sheets. For most years, the small difference between the two figures is used to adjust changes in surplus and reserves on the liabilities side, and changes in unclassified assets. For 1946, however, the difference is so large as to merit an adjustment of mortgages instead of unclassified assets. Changes in fixed capital have been adjusted for depreciation, and changes in capital paid in cash have been adjusted for premiums on capital stock.

SECTOR VII (e). MORTGAGE LOAN COMPANIES

These companies specialize in mortgage lending, and obtain the bulk of their funds from deposits and from the sale of guaranteed loan debentures and savings certificates. They fall into three groups. The financial statements of certain of the larger companies are published in the Reports of the Superintendent of Insurance for Canada and of the Ontario Registrar, dealing with Loan and Trust companies. Investors Syndicate of Canada has also been included, data being taken from the annual reports of the company and from *Moody's Bank and Finance Manual.* For the third group of companies, which are located mainly in the western provinces, no complete balance sheets were available, but their total assets and their mortgages are included in the tabulations on the operation of Loan Companies published by C.M.H.C. With these benchmarks, their balance sheets were estimated on the assumption that they were distributed in the same way as the Federal and Ontario registered companies.

Deposits, Loan Debentures and Savings Certificates are all classified as Other Institutional Deposits. In the case of Credit Foncier, a substantial portion of such liabilities are in foreign currencies, and an attempt was made to adjust the changes for exchange rate revaluations on the basis of information given in the company's annual reports.

While mortgages are shown in the balance sheets after deduction of reserves in some cases, values before reserve deductions are stated in appendices and were used. Other valuation adjustments, and depreciation, were treated in the same manner as in the Trust Company subsector.

SECTOR VII (f). CENTRAL MORTGAGE AND HOUSING CORPORATION

This subsector includes the operations of C.M.H.C. and V.L.A. housing, but excludes Wartime Housing Ltd. (before its acquisition by C.M.H.C. on March 31, 1948), Veterans Project Ltd. (Ottawa and Toronto), and Housing Enterprises of Canada Ltd. These enterprises have not been included, either because of data problems or because their activities have been covered elsewhere in the Accounts.

Expenditure on residential construction under the Veterans Land Act in 1946 and 1947 is included as part of business investment expenditure in the National Accounts. It seemed appropriate to include these expenditures in this subsector. These amounts ($15 million in 1946 and $2 million in 1947) were matched by credit entries under C4(c) Claims on Associated Enterprises. With this exception, this subsector consists of C.M.H.C. — the accounts being drawn from the Annual Reports of that corporation. The balance sheet titles and corresponding N.T.A. classification are given below.

ASSETS	N. T. A. Code
Cash	C 1 (b)
Cash (MIRF) — Bank of Canada	C 1 (b)
— In Transit	C 1 (b)
Government of Canada Securities	C 6 (a)
In guaranteed rentals a/c	C 6 (a)
In MIRF	C 6 (a)
Accrued Interest	D (c)
Accounts Receivable	D (c)
Expenditures recoverable from Provincial Governments	D (c)
Construction Expenditure for N. R.C.	D (c)
Due from Minister — current a/c (net)	D (c)
Maintenance Material & Supplies	B 2
Advances under the Integrated Housing Plan	C 4
Loans under the Housing Acts	C 5
Mortgages & Agreements of Sale	C 5
Advances to Municipalities and others on Deferred Repayment Terms	C 3 (b)
Real Estate (gross)	B 3 *
Real Estate — share in joint ownership	B 3 *
Office furniture & sundry equipment (gross)	B 3 (b)
Less Depreciation	B (a) contra
Other Assets	D (d)

* Real estate may be separated into residential or non-residential by reference to the Property Account. To derive investment from these totals, however, involves further adjustment including the making of an estimate for transactions in existing real assets.

LIABILITIES	N. T. A. Code
A/C payable & sundry accrued charges	D (c)
Accrued Interest	D (c)
Contractors Holdbacks and various deposits	D (a)
Less lodged with Dept. of Finance	D (a)
Prepaid Rents, Services, and Payments	D (c)
Employees Retirement Fund	C 8
Reserve for Guaranteed Rentals	C 4 (c)
Reserve for Purchase Guarantees	C 4 (c)
Reserve for Home Improvement and Extension Guarantees	C 4 (c)
Due to Receiver General under Section 30 CMHC Act	C 4 (c)
Estimated Income Tax less Instalment Paid	D (c)
Borrowings from Govt. of Canada	
Section 22	C 4 (c)
Section 37/45	C 4 (c)
Section 36/46	C 4 (c)
Unrealized Capital Surplus & Profits	**
Capital Paid up	C 4 (c)
Reserve Fund	C 4 (c)
Mortgage Insurance Reserve Fund	C 4 (c)

** Changes in this item are eliminated in the process of valuation adjustment.

The main adjustments have been made to fixed assets. The change in the unrealized capital surplus account, together with net gains from sales and net current assets acquired, have been deducted from the change in the fixed assets account. This adjusted change in fixed assets is then subdivided into residential construction, the estimate for which is described in the category notes, non-residential construction, estimated from the property account, and a residual net purchase of existing assets.

SECTOR VII (g). OTHER GOVERNMENT LENDING INSTITUTIONS

These institutions include two Federal Companies, the Industrial Development Bank, and the Canadian Farm Loan Board, and a number of Provincial organizations, engaged in providing finance to business activities in the form of mortgages or other investments. In the case of four Provincial institutions, the Fishermen's Loan Board and the Land Settlement Board of Nova Scotia, the Industrial Development Fund of Saskatchewan, and the Manitoba Farm Loan Board, complete statements were available; for a number of others, of which the most important are the Quebec Farm Credit Bureau, the Ontario Housing Corporation, and the Ontario Agricultural Development Board, the only information available was their outstanding mortgage loans, which was supplied by C.M.H.C. These

companies are included to the extent of their mortgage loans with a corresponding liability being recorded as owing to the Province.

Most of the transactions recorded for the subsector refer not to the calendar year but to the fiscal year ending on the following March 31st. Their debits are so classified as to secure consistency between the mortgage lending recorded and the C.M.H.C. Mortgage accounts, other financing appearing in the categories C3(b) and C7. On the liabilities side, virtually all credits have been classified as C4(c). This includes the sale of I.D.B. debentures to its parent company, the Bank of Canada, and these are valued at par plus unamortized premiums, thus being consistent with the treatment in the Bank of Canada's accounts.

SECTOR VII (h). INSTALMENT FINANCE COMPANIES

Included in this subsector are those companies engaged in the financing of purchases of durable goods via conditional sales contracts. This group is defined as those companies whose operations are reported in D.B.S., *Sales Financing,* with the exception of licensed money lenders, whose operations are included in the next subsector.

Sales Financing provides information only on retail instalment receivables (although a good deal of detail on the composition of these assets is to be found there). In order to obtain a more comprehensive picture of these companies' transactions, unconsolidated balance sheets were obtained for six of the larger companies, having in total 80 percent of the retail instalment receivables of the companies included in this subsector. For the remaining companies, estimates were made of the other balance sheet items by means of the following assumptions:

1. 10 percent of retail instalment receivables is held in cash, this being twice the ratio found in the larger companies.
2. Wholesale paper increases smoothly from zero at the beginning of the period to the known 1954 level.
3. Unearned Service Charges and Dealers' Credit Balances are the same proportion of retail instalment receivables as in the large companies.
4. Capital Stock and Surplus rise steadily at an assumed rate.
5. All other financing is by means of bank loans.

The principal asset items for these companies are retail instalment receivables and wholesale paper. The former is classified of course, as C2(b) Instalment Credit, but wholesale paper is classified as "receivables". Since this wholesale financing is the financing of dealers' inventories — principally in the automobile trade — it is short term, volatile and closely related to conventional trade credit.

The liability items Reserves for Unearned Service Charges and Dealers' Credit Balances are entered as "Special Deposit and Trust Accounts". The first is a suspense account in which service charges are held until contracts mature. Dealers' Credit Balances record the proportion of sellers' commissions that is held back as surety for instalment contracts.

While these sales finance companies obtain a portion of their funds from retained earning or from the sale of stock, the greater part comes from bank loans, debentures, term notes, and short term notes. The latter three are all classified as "other bonds". Of these, short term notes merit further discussion. These notes are issued in maturities ranging from 30 to 365 days, and in amounts of $10,000 or more. Although these notes are issued only by the larger companies, they have become of increasing importance in recent years.

Since General Motors Acceptance Corporation of Canada Ltd. and Canadian Acceptance Corporation Ltd. are subsidiaries of U.S. parents, the problem of classification between "investment in associated enterprises" and other liabilities arises. Capital stock of G.M.A.C. has been adjusted to allow for sales of stock and debentures to its parent company in 1953. These liabilities have been reclassified as C4(b). Certain short term funds obtained from the parent organization have also been classified as C4(b). In the balance of payments, the flows of funds from parent companies are included in Direct Investment before 1952; thereafter, the borrowings of Canadian finance companies appear under Other Capital Movements and have been classified as C6(d), and so there is some inconsistency between the two sectors.

SECTOR VII (i). SMALL LOAN COMPANIES AND LICENSED MONEY LENDERS

The principal business of these financial institutions is making cash loans to be repaid in instalments. The loans are relatively small and are mostly to individuals for non-business purposes. The balance sheets of these firms are recorded in the Reports of the Superintendent of Insurance for Canada, *Small Loan Companies and Money Lenders*. These reports, however, include only the business of Household Finance Corporation in the field of 'small loans', those amounting to less than $500 as defined in the legislation current during the period of these accounts; its other business has therefore been estimated with the help of selected information given in the Annual Reports of the parent company.

The total of 'small loans' and 'other than small loans' has been reclassified into 'loans', 'instalment credit' and 'miscellaneous'. The first is taken from the detail of consumer credit outstanding as published in the Bank of Canada *Statistical Summary;* estimates were made of the instalment credit extended by these companies included in D.B.S. *Sales Financing;* and the rest was left unclassified.

On the liability side, the principal entry is 'borrowed money'. The amount of bank loans was estimated from banking sources, and the remainder classified as Claims on Associated Enterprises; the largest companies in this field are subsidiaries of U.S. firms or of Canadian instalment finance companies. Small loan companies and licensed money lenders do not issue bonds or debentures, or accept deposits.

SECTOR VII (j). INVESTMENT COMPANIES

This subsector consists of a group of investment companies which are regularly included in The Financial Post *Survey of Industrials.*

Eleven large companies possessing 75 percent of total assets of the group were selected as a sample. Data for these sample companies were obtained from the *Financial Post Corporation Service* and the combined estimates inflated by the ratio of the change in total assets.

It was assumed that all securities held were stocks; on the liabilities side, a distinction was made between bonds and stocks on the basis of the bond issues and retirements of the sample companies.

SECTOR VII (k). FIRE AND CASUALTY INSURANCE

Included in this subsector are the following companies:

1. Canadian Fire Insurance and Casualty Insurance companies incorporated federally.
2. British and Foreign Fire and Casualty Insurance Companies operating in Canada.
3. Canadian Fire Insurance and Casualty Insurance Companies operating under Provincial licenses.
4. The Fire and Casualty operations of Lloyd's of London.

Data on these groups are drawn chiefly from the *Report of the Superintendent of Insurance for Canada.* Much of the Provincial data has had to be estimated employing ratios of given provincial company items to the same for federal companies. Figures for Lloyd's Fire and Casualty operations are derived from the account given in the *Report of the Superintendent of Insurance for Ontario.*

Whereas the services of Life Insurance Companies have been assessed as equal to their expenses plus profits, the services of Fire and Casualty Companies are treated as equal to expenses plus profits *minus* interest, dividends, and net rents received. This is done to maintain conformity with the National Accounts treatment of these companies.

Some Canadian Fire and Casualty Companies have foreign as well as domestic business operations. A separation of these transactions was made similar in principle to the separation carried out in the Life Insurance

Sector. Since information on foreign transactions is largely unavailable, estimates have been constructed employing known ratios.

Most of these companies include depreciation in their general expenses account. Rough estimates have been made for this item, based on the ratio of depreciation charged to the value of real estate assets for Canadian Life Companies. Gross Saving and the increment in the value of real estate have been adjusted on the basis of these estimates.

SECTOR VII (1). FRATERNAL BENEFIT SOCIETIES

This subsector includes Federally and Provincially licensed Fraternal Benefit Societies, and foreign Fraternal Benefit Societies which operate in Canada. The main source for the accounts is the *Report of the Superintendent of Insurance for Canada.* This account was estimated in a similar manner to the Fire and Casualty Insurance account.

SECTOR VII (m). GOVERNMENT INSURANCE INSTITUTIONS

Included in this subsector are the Export Credits Insurance Corporation, the Saskatchewan Government Insurance Office, and the Saskatchewan Guarantee and Fidelity Company Ltd. The Annual Reports of Export Credits and Insurance Corporation are available for the whole period and have been used as the source of information. The Saskatchewan companies have been included from 1950 on, when their accounts became available in the Annual Report of Crown Corporations in the Province of Saskatchewan.

SECTOR VIII. THE FEDERAL GOVERNMENT

The Federal Government accounts include both the budgetary accounts and the accounts of those extra budgetary agencies which are not deemed to be business enterprises and thus included in Sector IV or elsewhere. The budgetary accounts will be considered first.

The prime source of information on the operations of the Federal Government is of course the *Public Accounts,* which contain great detail both on the revenue and expenditure of the government and also on its financial transactions; and a very detailed balance sheet is presented there. For the purposes of the National Transactions Accounts, however, these statements are subject to two great disadvantages: on the one hand, the *Public Accounts* do not refer to any calendar year, but rather to the fiscal year which ends on March 31st; on the other, their accounting basis differs somewhat from the conventional business basis, being specially designed to further the basic principles of public and parliamentary control and supervision of the financial activities of government. The National Accounts made a great number of adjustments to revenue and expenditure, both to reach a calendar year basis, and to approach an actual transfer

of goods and services basis. These include adjustments to place certain transactions such as corporate tax payments on an accrual rather than a cash basis; to place others on a disbursements rather than an appropriations basis; to eliminate transactions in existing real assets, capital gains and losses and reserve adjustments; and so on.[3] To perform a similar operation of adjustment on the financial transactions involves eliminating certain balance sheet headings, adding others, and deriving data from a variety of sources. The simplest way of explaining the results is to go through the sector account and explain the content and source of each category entry.

One general comment of importance, however, concerns the treatment of government expenditure on inventories and new fixed capital. In the national accounts these are not included in investment, but rather in current expenditures on goods and services; in the N.T.A., the opposite treatment is accorded them, and in consequence the gross saving of government is larger than the surplus recorded in the National Accounts; this estimate of the surplus corresponds to saving minus investment. Reference should also be made to Sector IV(c), where the treatment of the operation of government buildings is discussed.

Debits

B2. *Change in Inventories.* This is the change in the inventories of the commodity agencies.

B3. *Gross Fixed Capital Formation.* The source for this material is *Private and Public Investment in Canada*, adjusted as described in the notes on this group of categories.

C1(b). *Currency and Bank Deposits.* Included here are the Canadian and foreign currency deposits at the Bank of Canada and the chartered banks. Information is derived from the banking records, and adjusted for chartered bank float, the amount of taxes accruing which are included in chartered bank deposits and the revaluations of foreign currency deposits due to exchange rate changes.

C1(c). *Other Institutional Deposits.* Deposits at the Quebec Savings Banks are taken from their returns.

C3(b). *Other Loans.* Loans to National Governments and to the I.M.F. and I.B.R.D. are taken from the Balance of Payments. Loans to Provincial and Municipal Governments, to Canadian companies and to persons are estimated from the Public Accounts and are mostly on a fiscal rather than a calendar year basis. Loans to persons have been adjusted to exclude mortgage loans.

[3] A statement reconciling the Federal Government surplus as shown in the Public Accounts on a fiscal year basis and as shown in the National Accounts on a calendar year basis may be found in Table 53 of *National Accounts, Income and Expenditure, 1926-1956*. See also D.B.S. Reference Paper No. 39. *Government Transactions Related to the National Accounts 1926-1951.*

C4(c). *Claims on Associated Enterprises: Government.* These are taken from the accounts for the enterprises which appear in the following sectors: IV(a), IV(c), V(a), V(b), VII(f), VII(g), and VII(m).

C5. *Mortgages.* This information is derived from the C.M.H.C. mortgage accounts.

C6(a). *Government of Canada Bonds.* This estimate is derived from the records of the holdings of the Government Accounts with some modification on the basis of Public Accounts data.

C6(d). *Other Bonds.* Transactions in United Kingdom securities held in the sinking fund are included here.

D(a). *Transfers of existing real assets.* Estimates of the purchases of existing real assets and of capital assistance to industry were obtained from the worksheets of the National Accounts.

D(c). *Recorded Receivables.* The principal item in this category is accrued corporate taxes, based upon the excess of corporation tax accruals over collections published in the National Accounts reconciliation statement concerning the government surplus. A smaller item is the accrued interest on loans to national governments estimated from the Public Accounts.

Credits

B1(b). *Other Saving.* This is the amount of the Government surplus as recorded in the National Accounts, plus the amount of Government investment in inventories and new fixed capital.

C1. *Currency and Bank Deposits.* Issue of coinage is shown in this category. Subsidiary coin is always included as an asset by the holder as part of his cash, and is shown here as a credit in order to maintain balance in the category. No such liability appears in the *Public Accounts,* for the Government accepts no obligation to redeem coins at face value. The figures were obtained from the Bank of Canada.

C6(a). *Government of Canada Bonds.* Figures for the debt outstanding are taken from the Bank of Canada *Statistical Summary,* and adjusted by deducting an estimate of the discounts on issues derived from the Public Accounts.

C8. *Pensions and Insurance.* Included here are Government Annuities, as shown in the Direct Estimate of Personal Saving, and also the Civil Service, Returned Soldiers, War Damage and other Insurance Funds, estimated from the Public Accounts on a fiscal year basis.

D(a). *Transfers of Existing Real Assets.* These are derived from the National Accounts worksheets and from the accounts of the Government enterprises.

D(b). *Special Deposit and Trust Accounts.* Included here are a number of items, estimated from the Public Accounts. The larger ones are the Newfoundland 'financial surplus', the Post Office net liability for money orders and deposits with the Receiver General, Contractors' Security deposits, and the Indian Trust Funds.

D(c). *Recorded Payables.* The components of this category are interest due and outstanding, interest accrued (since 1953), outstanding Treasury cheques and warrants, bank float and the amount payable to C.M.H.C. on account of defence housing. Since some of these items are recorded on a fiscal rather than a calendar year basis, they should not be considered separately but rather in conjunction with the residual.

D(e). *Residual.* This item balances the accounts.

The Extra Budgetary Agencies

Allied War Supplies Corporation	1946
Atomic Energy of Canada Ltd.	1953-1954
Canadian Broadcasting Corporation	1946-1954
Canadian Sugar Stabilization Corporation	1948-1950
Crown Assets Disposal Corporation	1946-1954
Defence Construction Limited	1952-1954
Eastern Rockies Forestry Conservation Ltd.	1949-1954
Federal Aircraft Ltd.	1946
Federal District Commission	1946-1954
National Battlefields Commission	1946-1954
National Film Board	1949-1954
Turbo Research Ltd.	1946
Wartime Shipbuilding Ltd.	1946-1947
War Supplies Ltd.	1946-1948

The above agencies are not treated as business enterprises and are included here. Their balance sheets are to be found in the Public Accounts.

None of these accounts is available on a calendar year basis; because of this, and because of the difficulty encountered in classification the estimates are open to serious question. It may be worth showing their contribution to the Sector Account, so that the budgetary accounts can be derived by subtraction if required.

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits									
C1 (b)........	—12.0	—3.1	—7.1	1.7	—4.6	1.5	2.7	2.9	1.1
C5...........	1.2	1.9	1.1	3.4	— .7	—1.2	— .8	— .7	— .2
C6 (a)........	18.1	— .2	— .4	4.1	—17.7	1.0	—	3.5	.3
D (c)........	—16.7	—38.8	—8.1	—12.0	1.9	—11.1	—2.5	—2.5	.4
Total......	—9.4	—40.2	—14.5	—2.8	—21.1	—9.8	— .6	3.2	1.6
Credits									
C3 (a)........	—4.4	—	—	—	—	—	—	—	—
D (b)........	—	—	—	—	—	—	.2	.1	—
D (c)........	—4.9	—8.7	—3.5	—1.3	—1.0	1.2	3.3	.4	.2
D (d)........	2.7	— .8	—4.7	—3.4	—4.5	—5.4	—13.6	—9.3	—20.2
Consolidating account....	—2.8	—30.7	—6.3	1.9	—15.6	—5.6	9.5	12.0	21.6
Total......	—9.4	—40.2	—14.5	—2.8	—21.1	—9.8	— .6	3.2	1.6

The last line 'Consolidating Account' records transactions between the government and these agencies which are eliminated by consolidation from the Sector Account. It is a matter of little importance whether an item appears in this category or in the residual, since the same classification is adopted in the budgetary accounts and thus leads to the same total residual when the two are combined.

SECTOR IX. PROVINCIAL GOVERNMENTS

This sector includes all Provincial Government departments and Provincial farms and hospitals, superannuation or retirement benefit funds and Workmen's Compensation Boards. Excluded are the business enterprises included in Sectors IV(b), VII(g) and VII(m) and certain trust funds for which the assets and liabilities are segregated.

The prime sources of information are the *Public Accounts* of the Provinces, the annual D.B.S. publications *Financial Statistics of Provincial Governments* based upon them, and the reports of special agencies such as Workmen's Compensation Boards and pension funds. The actual procedure followed was to start with the data given for each province in *Financial Statistics of Provincial Governments*, and then obtain the information required for further classification or adjustment and for agencies not covered from the other sources. There were in addition some final revisions made to the combined provincial government totals where independent information on various types of transactions appeared more reliable. The fiscal year of all provinces ends on March 31st, and it has been necessary to use fiscal year data for each calendar year ending on the previous December 31st except in those cases where independent estimates were made of Provincial Govenments' transactions from sources other than the *Public Accounts*.

Comments on specific categories of transactions follow:

Debits

B3(b). *Gross Capital Formation*: *Non-Residential*. Obtained from *Private and Public Investment*.

C1. *Currency and Deposits*: In *Financial Statistics of Provincial Governments,* bank overdrafts were netted against cash, and so it was necessary to add back the estimate of bank borrowing. Other Institutional Deposits were taken from the Category Account and deducted from cash.

C4(a). *Claims on Associated Enterprises*: *Government*. The estimate of these transactions was taken from the accounts of the enterprises. It may be noted that the Ontario Hydro Electric Power Commission issued bonds directly to the Province of Ontario in 1951, 1952 and 1953, and these are classified here rather than in the bond category both in this sector and in the Government Enterprise sector. An adjustment was made in 1953 on account of the writedown of the debt owing to British Columbia by the Pacific Great Eastern Railway.

C5. *Mortgages*: Data supplied by C.M.H.C.

C6. *Bonds*: Information on the composition of investments held by Provincial Governments and particularly by such special agencies as pension funds is seriously incomplete, and it had to be assumed that total investments were distributed in the same manner as those for which a breakdown is available.

D(a). *Transfers of existing assets*: The large items in recent years are composed mainly of receipts of funds by the Province of Alberta from companies engaged in the exploration for oil and natural gas.

D(b). *Special Deposit and Trust Accounts:* The principal item included here is the money held in trust by the Government of Canada for the Province of Newfoundland.

D(c). *Recorded Receivables*: The information in *Financial Statistics* is supplemented by information from the *Public Accounts*. Some Provinces show amounts receivable from the Government of Canada, arising mainly from shared costs such as highways and old age assistance and from transactions under the tax agreements. They do not appear as payables in the Government of Canada Accounts and are omitted.

Credits

B1(b). *Other Saving*: This is the sum of the surplus shown in the National Accounts and the investment in inventories and fixed assets.

C3(a). *Bank Loans*: Estimated from the banking statistics.

C3(b). *Other Loans*: In the pre-war period, the Government of Canada advanced money to the four western provinces to help finance the cost of relief, and the advances were secured by specially issued Treasury Bills. The repayment of these advances are shown in this category; they do not reflect the decline in the amounts outstanding which occurred in March 1948 when $71 million were written off.

C6. *Bonds*: For the period 1952-1954, the estimates of net new issues of bonds by Provincial Governments were based on data published in the Bank of Canada *Statistical Summary;* for the earlier period, fiscal year estimates based upon the *Public Accounts* were adjusted to a calendar year basis by means of the detailed records of issues and retirements. A fuller account of the methods used appears in the notes on the category account.

D(b). *Special Deposit and Trust Accounts*: Changes in the trust funds held by the provinces for which assets are not ear-marked appear here; the largest item is the net liability of the Province of Ontario for the Province of Ontario Savings Office.

D(e). *Residual*: This is the result of using independent information in various categories.

SECTOR X. MUNICIPAL GOVERNMENTS

Included in this sector are all municipal activities except those identified transactions of organizations which have been classified as municipal government enterprises. The principal source of information is the annual D.B.S. publication *Financial Statistics of Municipal Governments* which is based in turn upon the annual reports of the various provincial departments of municipal affairs and on the annual reports of cities and commissions.

Unlike the Federal and Provincial Governments, municipalities generally prepare their accounts on a calendar year basis, although many school districts close their fiscal year on June 30. There are other difficulties in the source material however. Assets and liabilities of municipalities in the Province of Quebec are reported for the end of 1945 and 1951-1953, but not for the end of 1946-1950 and 1954, and estimates for the missing years were made by interpolation and extrapolation, except in the case of debenture debt for which information is available in the Bank of Canada *Statistical Summary* and of surplus which was adjusted to correspond with the drop in funded debt arising from the formation of the Quebec Municipal Commission.

A further difficulty lies in the classification of assets and liabilities, which appear under the following headings in *Financial Statistics of Municipal Governments.*

Consolidated Assets	**Consolidated Liabilities**
Cash	Bank overdrafts and temporary loans
Investments	Accounts payable:
Accounts receivable:	Sundry
Sundry (gross)	Due to province
Due from province	Due to Dominion
Due from Dominion	Due to special districts
Due from special districts	Debenture debt (gross)
Taxes receivable (gross)	Other long term indebtedness:
Property acquired for taxes (gross)	Due to province
General fixed assets (gross)	Due to C.M.H.C.
Due from schools	Other
Due from other boards and commissions	Due to schools
Due from trust funds	Due to other boards and commissions
Other assets.	Due to trust funds
	Other liabilities
	Surplus (including reserves and investment in capital assets)

Without additional detail, it is impossible to make an accurate classification of these statements into the standard categories of the National Transaction Accounts; the large entries under 'other assets' and 'other liabilities' particularly presenting problems.

Financial Statistics of Municipal Governments for the years 1945-1950 in Tables 14 and 15 show considerable detail on investment. These were used to allocate investments of municipal governments for these years and the 1950 ratios were used for the years 1951-1954. Other information is taken from various sources. Gross capital formation is taken from *Public and Private Investment,* municipal hospitals being excluded, and gross saving is the sum of this and the surplus shown in the National Accounts. Data on bank loans are based in the quarterly classification of loans published in the Bank of Canada *Statistical Summary,* and loans from the Federal and Provincial Governments are estimated from their *Public Accounts.* The mortgage estimate was supplied by C.M.H.C. Debenture debt which is guaranteed by the Province and therefore classified as Provincial rather than Municipal Bonds was estimated from D.B.S. *Financial Statistics of Provincial Governments.*

It will be noted however that substantial entries appear on both sides of the accounts under the heading 'unclassified transactions', and the residual, which is the result of substituting independent estimates, is fairly large.

SECTOR XI. REST OF THE WORLD

The accounts for this sector are derived almost entirely from the Balance of Payments statistics which record the transactions between Canadians and non-residents on the same conceptual basis as the National Transactions Accounts. The detail underlying the statements published in the D.B.S. publication *Canadian Balance of International Payments* was made available by the International Trade Division of the Dominion Bureau of Statistics, and reclassified into the N.T.A. categories. To describe this reclassification precisely, the Balance of Payments headings have been listed below, with the corresponding N.T.A. category code.

In three places, however, additional information was obtained in order to provide the detail required for classification. The net investment of Canadian life insurance companies in the foreign branches less the net investment of British and foreign companies in their Canadian operations, as calculated in the Life Insurance Sector Account, was entered in category C4(b), Claims on Associated Enterprises, Corporate, and an equal amount included with opposite sign in the residual in order to maintain the balance of the account.

The net foreign position of the chartered banks is the balance of their foreign currency assets over their foreign currency liabilities. From the banking statistics, it is possible to estimate the transactions between the chartered banks in Canada and non-residents, under such headings as foreign currency, deposits at foreign banks, and foreign securities owned by the banks; deposits at the chartered banks owned by non-residents; and the net investment of the banks in their foreign branches. In order to convert the balance of these transactions to the change in the foreign position, it is necessary to deduct the Canadian dollar deposits owned by non-residents and add the foreign currency deposits owned by Canadians. All these various components of the net foreign position may be classified into the appropriate N.T.A. categories. Unfortunately, the net foreign position calculated in this way differs substantially in many years from the estimate which is included in the Balance of Payments, since it has not been possible to reconcile the sources of these component estimates with the material specifically designed to measure net flows for the Balance of Payments. The difference is included in the residual.

The Official Holdings are similarly the net foreign position (in gold, U.S. dollars and sterling) of the Exchange Fund, the Bank of Canada and the Government of Canada, and consist of monetary gold and foreign currency deposits and securities, less the foreign currency deposit liabilities of the Bank of Canada. From the accounts of the three sectors, it is possible to obtain the year end balances of these various assets and liabilities at their current value in Canadian dollars. The changes in these balances reflect not only transactions, however, but also revaluations

due to changes in the exchange rate between the Canadian dollar on the one hand and the U.S. dollar and sterling on the other. In the earlier years, revaluation occurred only on two specific occasions, July 5th, 1946 and September 20th, 1949, and could be estimated without difficulty; after September 30th, 1950, however, the exchange rate was allowed to find its own level from day to day. In this period, transactions in the various categories were estimated directly by calculating the quarterly changes in each item valued in the original currency of payments, and converting to Canadian dollars at the average rate of exchange during the quarter. When the results are added, the total change in official holdings is very close to the Balance of Payments estimate which is derived by applying the same method of calculation to the total; and the estimate of revaluation of the Exchange Fund's assets — which comprise much the largest part of Total Official Holdings — can be reconciled with

THE BALANCE OF PAYMENTS WITH N.T.A. CODING

Balance of Payments Code	Items	N.T.A. Code
	Current Account Balance (as in National Accounts)...	Cr. B1
A7	Inheritances and Migrants' Funds: Receipts.........	Dr. C9
B7	Inheritances and Migrants' Funds: Payments........	Cr. C9
D1	Direct Investment in Canada.......................	Dr. C4 (b)
D2	Direct Investment Abroad.........................	Cr. C4 (b)
D3, 4, 5	Net Purchases of Canadian Securities by Non-Residents:	
	Government of Canada Bonds................	Dr. C6 (a)
	Provincial Bonds............................	Dr. C6 (b)
	Municipal Bonds............................	Dr. C6 (c)
	Other Bonds................................	Dr. C6 (d)
	Stocks......................................	Dr. 7
D6, 7, 8	Net Sales of Foreign Securities by Non-Residents:	
	Bonds......................................	Cr. C6 (d)
	Stocks......................................	Cr. C7
D9, 10, 11, 12	Loans and Advances by Government of Canada......	Cr. C3 (b)
D13	Gold and U.S. $ Subscriptions to I.M.F. and I.B.R.D..	Cr. C3 (b)
D14	Change in Canadian $ Holdings of Foreigners:	
	Net Non-Resident Deposits:	
	with Banks in Canada...................	Dr. C1 (b)
	with other financial institutions.............	Dr. C1 (c)
	with others............................	Cr. D (d)
	Treasury Bills..............................	Dr. C6 (a)
D15	Refunding Loan Proceeds Set Aside for Retirement...	See Official Holdings
D16 or H1, 2	Change in Official Holdings........................	See Below
D17	Other Capital Movements:	
	Loan by U.K. Government to a Canadian Corporation..................................	Dr. C3 (b)
	Other Long Term Capital Transactions..........	Cr. C3 (a) Cr. C9 Cr. D (d)
	Short Term Canadian Dollar Holdings of I.M.F. and I.B.R.D...........................	Dr. C1 (b) Dr. C6 (a) Cr. C3 (b)
	Bank Balances and other Short Term Funds Abroad*...............................	Cr. C1 (b) Cr. C6 (d)
	Borrowings by Canadian Finance Companies....	Dr. C6 (d)
	Other Short Term Capital Movements..........	Cr. D (c)

*Except Net Foreign Position of the Chartered Banks, for which see below.

SUPPLEMENTARY INFORMATION

	N.T.A. Code
LIFE INSURANCE: NET INVESTMENT IN FOREIGN BRANCHES	Cr. C4 (b) and contra Cr. D (c)
NET FOREIGN POSITION: CHARTERED BANKS	
Transactions between banks and non-residents:	
Foreign currency owned by banks	Cr. C1 (b)
Deposits at non-resident institutions	Cr. C1 (b)
Non-resident deposits at Chartered Banks:	
Canadian $ deposits	Offset below
Foreign currency deposits	Dr. C1 (b)
Foreign securities owned by banks	Cr. C6 (d)
Net Investment in foreign branches	Cr. C4 (b)
Total: Net Bank Debits/Non-resident Credits	
Deduct: Canadian $ deposits of non-residents	Offset above
Add: Foreign currency deposits — Exchange Fund	Offset in official holdings
Foreign Currency — other residents	Deducted from Cr. C1 (b)
Estimated Net Foreign Position	
Residual Error	Cr. D (e)
Net Foreign Position as in D17 above.	
OFFICIAL HOLDINGS:	
Gold	Cr. C1 (a)
Foreign Currency Deposits*	Dr. and Cr. C1 (b)
Foreign Securities	Cr. C6 (d)
Sundry Exchange Fund Assets	Cr. D (e)

* Except Exchange Fund deposits at Chartered Banks, offset against entry under Net Foreign Position: Chartered Banks; and Refunding Loan Proceeds set aside for retirement offset against D15.

changes in the Exchange Fund's reported 'deficit due to revaluation' and 'reserves against outstanding forward contracts'.

While the attached specification of the manner in which the Balance of Payments is classified into the N.T.A. categories is largely self-explanatory, two comments should be added. The first concerns the items which are included in the loan categories; these are not a complete catalogue of all such transactions between residents and non-residents but only a selected few which have been identified, and the categories should be interpreted accordingly. The second concerns the classification of items into the D account categories. The group of 'all other transactions including changes in loans and accounts receivable and payable', while including a residual element, largely consists of receivables and payables. The series is therefore entered in D(c), as net non-resident payables, with the exception of minor amounts included elsewhere, mainly in the loan category. The entries in D(e) then consist largely of the irreconcilable differences in the estimates of the net foreign investment of the banks and life insurance companies.

CATEGORY BI (a). CAPITAL CONSUMPTION ALLOWANCES, Etc.

Capital consumption allowances and miscellaneous valuation adjustments, the national accounting category which was previously known as depreciation and similar business costs, includes the following types of charges: depreciation; capital outlays charged to current expense, less non-capital outlays charged to capital account such as mining development and exploration costs; brokerage fees and real estate commissions; fire and other claims; scrap and salvage allowance, amortization and other charges to reserves; and bad debt losses. The nature of these charges is discussed on page 111 of *National Accounts, Income and Expenditure, 1926-1956.*

The estimates used here are very largely drawn from the national income and expenditure accounts. Table 51 of the above source gives a breakdown of total depreciation by form of organization. Sector II and Sector IV debits are taken directly from the table, the latter being broken down into its subsectors from the unpublished detail. Depreciation of the financial sectors was based upon the sector sources; in some cases, where fixed capital was shown after deduction of depreciation and no data on the annual charge could be found, the estimate was derived by taking 5 percent of the book value of fixed capital, this being the ratio permitted on structures in the income tax regulations. For non-financial corporations, the total shown for corporations in the National Accounts table was reduced by the estimate for the financial sectors.

CATEGORY BI (b). OTHER SAVING

Included here are personal saving, the retained earnings of corporations, government saving and the current account deficit.

In general, government business enterprises are deemed to pay all their current earnings to their parent governments, and so their retained earnings are zero. The Canadian Wheat Board is a special case, however, since its earnings ultimately accrue to the farmers but are not deemed to enter farm income in the current period. For Sector IV, therefore, the entry in this category consists of the 'adjustment on grain transactions' which appears in the National Accounts.

Estimates of the retained earnings of the financial sectors are based upon their own source material, and deducted from the National Accounts estimate of corporate retained earnings to provide the estimate for non-financial corporations.

Government saving in the National Transactions Account equals the surplus on the National Accounts basis plus an amount equivalent to Government fixed capital formation and inventory change, which are treated in the N.T.A. as capital rather than current expenditures.

CATEGORY BI (c). RESIDUAL ERROR OF THE NATIONAL ACCOUNTS

The gross residual error of the National Accounts, the sum of the two halves which are entered with opposite signs on the two sides of the Accounts, is shown as part of the gross savings of the non-financial corporate sector for the following reason. Total gross saving of the business sector is estimated by deducting expenditures from receipts; it is the balancing item in the A account. Independent estimates are available however of the depreciation and retained earnings of corporations, and appear in B1(a) and B1(b). The residual error is necessary in order to reconcile these independent estimates of the components with the residual estimate of the total.

CATEGORY B2. CHANGE IN INVENTORIES

The transactions appearing in this category include the value of the physical change of inventories as recorded in the National Accounts, and in addition the change in certain government inventories. All transactions are entered as debits; the sum of these debits and the debits recorded in Category B3 equals total gross saving, or the balance of credits over debits in Category A5, Goods and Services, n.e.i.

The Federal government sector's debits represent the change in the inventories of certain commodity agencies, published for some years in the National Accounts publications; see footnote 2 to Table 9 in the 1926-50 publication. Provincial government sector debits were derived from that sector's sources. The total value of physical change of inventories in the business sector was divided between the sectors as follows. All 'Grain in Commercial Channels' was assigned to the Canadian Wheat Board in Sector IV(a). The inventories of other government enterprises in Sector IV and of C.M.H.C. in Sector VII were estimated from their balance sheets. Unincorporated business debits were estimated by adding the following percentages of inventory change by industry: 100 percent of Agriculture, 17 percent of Wholesale Trade, 55 percent of Retail Trade and 5 percent of Manufacturing. All remaining debits were entered in Sector III.

CATEGORY B3(a). GROSS FIXED CAPITAL FORMATION: RESIDENTIAL

The total of residential construction expenditures shown in this category equals the total shown in *Private and Public Investment in Canada,* but is larger than the total shown in the National Accounts which does not include government housing expenditures.

Total debits for Sectors VII and VIII were obtained from Central Mortgage and Housing Corporation. From 1950 on, the relevant information is contained in *Canadian Housing Statistics* published quarterly by

C.M.H.C. (see Table 13 of the 3rd quarter, 1957 issue). The total for Government Departments, which is the Sector VIII total, mainly consists of housing for married service personnel constructed for the Department of National Defence. The Government enterprise total includes construction under the Federal-Provincial Agreements and Veterans' Rental Housing. The total has been assigned to Sector VII(f) which includes Central Mortgage and Housing Corporation and housing operations under the Veterans' Land Act which amounted to $15 million in 1946 and $2 million in 1947.

The Government enterprise total was deducted from the total of residential construction shown in the national income and expenditure accounts, and the remainder allocated 5 percent to Sector III and 95 percent to Sector II. All investment, it will be recalled, is a function of business in the National Accounts, and therefore the main bulk of housing expenditures appears in the unincorporated business sector rather than the Consumer sector.

CATEGORY B3(b). GROSS FIXED CAPITAL FORMATION: NON-RESIDENTIAL

New non-residential construction and machinery and equipment expenditures are combined in this category, the basic source of data for which is *Private and Public Investment in Canada* published by the Department of Trade and Commerce. Total capital expenditures reported in *Private and Public Investment in Canada* are larger than the corresponding expenditure included in the National Accounts which treat as current expenditure the acquisition of fixed capital assets by the Government sectors. In the National Transactions Accounts, however, Government capital expenditures are shown as such and total debits in this category are therefore equal to the *Private and Public Investment in Canada* total.

Sector II. Unincorporated Business:

Unincorporated business investment was estimated by applying certain fixed percentages to various industrial and institutional categories shown in *Private and Public Investment in Canada.* These percentages are listed in the description of Sector I and II accounts, on page 514 above.

Sector III. Non-Financial Corporations:

The balance of total capital expenditures recorded in *Private and Public Investment in Canada,* over and above the estimates for unincorporated business, government enterprises, financial institutions and governments, is allocated to non-financial corporations.

Sector IV. Government Enterprises:

The estimate for 'government owned enterprises', which is given by level of government in *Private and Public Investment in Canada*, is adjusted to exclude the Bank of Canada, which is included in Sector V, and the Canadian Broadcasting Corporation which is included in Sector VIII.

Sector V. Banking:

Independent estimates are made for the Bank of Canada and the chartered banks from their own sources. An adjustment is made to the sector as a whole in order to convert the total to the *Private and Public Investment in Canada* series on banking.[4] An equal and opposite adjustment is made to transactions in existing assets in order to maintain balance within the sector.

Sector VI. Life Insurance:

This estimate was derived from the statements contained in the Insurance Reports.

Sector VII. Other Financial Institutions:

Preliminary estimates for each group of financial institutions were made from their own statements, increasing the change in the book value of fixed assets by an estimate of depreciation where necessary, and these appear in the subsector statements. An adjustment was made to the sector as a whole, however, in a similar fashion as in the banking sector, for the difference between the *Private and Public Investment in Canada* series for 'Insurance, Trust and Loan Companies' after deduction of the life insurance company estimate, and the preliminary estimates for the corresponding subsectors.

Sectors VIII-X. Governments:

Estimates of capital expenditures by Government departments and institutions are given by level of government in *Private and Public Investment in Canada*. Certain modifications were necessary: investment by the C.B.C. which falls within the government rather than the business sector was added to the federal government series; on the other hand, expenditures on provincial universities and municipal hospitals were deducted from the Provincial and Municipal Government series.

CATEGORY CI (a). GOLD

The transactions in this category refer only to monetary gold. When gold is mined, a physical commodity is produced, and to the extent that gold passes into the hands of fabricators of jewelry and other finished goods for sale, it retains the nature of a commodity and such transactions appear

[4] It may be noted that the Bank of Canada is included in 'banking' in the industrial classification and in 'government owned enterprises' in the classification by form of organization.

in the non-financial accounts. When gold passes into the hands of the Exchange Fund, however, it appears as a capital asset and this increase is not considered to be a part of good domestic investment; thus it has to be considered a financial asset, and at that point becomes monetary gold.

The way in which this transformation is accounted for is to assume that all newly produced gold which does not pass into the hands of fabricators is exported, and commodity exports are in fact so defined. Then the gold which passes into the hands of the Exchange Fund is assumed to be a financial claim upon the rest of the world. Thus when gold is sold to the Exchange Fund the N.T.A. registers this fact with six entries: in category A5 the producer is credited, the Rest of the World is debited, in category C1(a) the Rest of the World is credited and the Exchange Fund debited, in category C1(b) the seller is debited and the Exchange Fund credited.

CATEGORY CI (b). CURRENCY AND BANK DEPOSITS

This category includes subsidiary coin, and the bank note and deposit liabilities of the Bank of Canada, the chartered banks and foreign banks. It is possible to separate these items on the liability side of the account, but not on the asset side since the holders normally do not distinguish between the different parts of their cash holdings. What detail is available is shown in the category tables.

Subsidiary coin is issued by the Mint through the Bank of Canada, and appears as a credit of the Government of Canada. As is explained in the notes on the Government of Canada account, this presentation does not follow the conventions of the Government's own accounting system, which does not recognize coinage outstanding as a liability but takes the mint gain on coinage into current revenue. The change has been made, however, to secure consistency with the accounts of those in possession of the coins who treat them as financial assets. Most bank notes in circulation have been issued by the Bank of Canada, but there are still some chartered bank notes outstanding although the liability for them was taken over in 1950 by the Bank of Canada. Bank liabilities have been distinguished in the detailed tables between Canadian currency and foreign currency liabilities, most if not all of the latter being in the form of deposits. Chartered bank deposits are shown after deduction of bank float, but Bank of Canada deposits are not.

Most debit entries have been derived from the sector sources, but Provincial Government deposits at the chartered banks are taken from the banking returns, and Government of Canada deposits are comparable with the figures shown in the banking statistics after adjustment for float and accrued taxes. In accordance with the convention that Sector II holds no liquid assets, no entry is made there and the Sector I estimate is obtained

residually. The detail of Sector I's holdings are derived by assuming that this sector owns all personal savings deposits and 95 percent of the currency outside banks.

CATEGORY C1 (c). OTHER INSTITUTIONAL DEPOSITS

Included in this category are the deposits of the various savings institutions, postal orders outstanding, and non-marketable securities, such as the savings certificates of Investors Syndicate, investment certificates, and loan debentures. Naturally, all credits in this category are liabilities of Sector VII.

Most of these deposits are owned by individuals and by non-financial corporations. Some information on the debt of other sectors is known, however — Quebec Savings Banks report deposits of the Government of Canada, Alberta Treasury Branches report the deposits of Provincial Governments, and estimates of non-resident deposits with trust and loan companies were obtained. The sum of these figures amount to only one percent of the total.

The split of the remaining 99 percent of the debit items is based on the following percentages:

Post Office Savings Bank	100 percent to Sector I
Quebec Savings Banks	
Credit Unions	

Newfoundland Savings Bank — 75 percent to Sector I, 25 percent to Sector III.

Province of Ontario Savings Office — 90 percent to Sector I, 10 percent to Sector III.

Trust & loan companies — all of the savings certificates of Investors Syndicate plus 70 percent of the deposits and related liabilities of other Trust and Mortgage Loan companies to Sector I; the rest to Sector III.

CATEGORY C2 (a). CONSUMER CHARGE ACCOUNTS

The consumer credit statistics published in the Bank of Canada *Statistical Summary* contain a series of estimates of charge accounts outstanding, upon which this category is based. The estimates are drawn from D.B.S. *Retail Credit* and exclude the charge accounts of certain categories of retail dealers whose credit is extended mainly to farmers or other business rather than to consumers. Prior to 1948, no separation of retail charge and instalment credit was published, and had to be estimated in the light of the 1948 breakdown and data in the 1941 census.

All credits are of course assigned to Sector I. Debits are distributed between Sectors II and III on the assumption that all department stores

are incorporated, and that one-half of the credit in other categories is on the books of corporate dealers.

CATEGORY C2 (b). INSTALMENT CREDIT

Instalment credit is extended both by retail dealers and by specialized financial institutions. Retail dealers' instalment credit is estimated from D.B.S. *Retail Credit,* the portion included in the consumer credit statistics being assigned to Sector I and the remainder to Sector II. The methods of distributing the debits and estimating the total before 1948 are the same as those used for charge accounts.

Instalment credit extended by financial intermediaries is taken from D.B.S. *Sales Financing*. A small amount is provided by small loan companies and licensed money lenders and the rest by instalment finance companies. In *Sales Financing* a great deal of information is given on the types of goods financed in this way, and it is assumed that all the financing of consumer goods is a liability of Sector I, and all the financing of commercial and industrial goods is a liability of Sector II. Before 1947, estimates had to be made on the basis of the consumer credit statistics and information supplied by some of the larger finance companies.

CATEGORY C3 (a). BANK LOANS

Bank loans are so defined as to include only the loans made by chartered banks in Canada. Loans made by other financial institutions, including savings banks, are classified as other loans.

The credits of Sectors I, II, IX and X have been derived from the quarterly classification of loans in the Bank of Canada *Statistical Summary*. The estimate for Sector I is obtained by adding loans to "religious, educational, health and welfare institutions" and "personal" loans. Sector II estimates are calculated by applying the following percentages to certain classes of business loans:

Farmers	100	percent
Chemical and Rubber Products	1	"
Food, Beverages and Tobacco	14	"
Forest Products	10	"
Furniture	10	"
Iron and Steel Products	2	"
Textiles, Leather and Clothing	10	"
Other Industrial Products	10	"
Merchandisers	50	"
Construction Contractors	50	"
Other Business	50	"

The credits for Sectors IV, VI, VII and XI are taken from the respective sector sources. The Sector III estimate is then obtained as a residual. These residual estimates, for most years are similar to estimates derived from *Taxation Statistics,* the two series being as follows:

	Residual Estimate	Estimate based on *Taxation Statistics*
	(millions of dollars)	
1946	69.1	66.9
1947	252.7	252.0
1948	69.8	57.8
1949	4.0	40.5
1950	224.1	223.9
1951	206.5	254.1
1952	92.7	110.7
1953	345.4	262.6
1954	37.9	189.6

Adjustments have been made to allow for the inclusion of Newfoundland in 1949, and to reverse the deductions for hidden reserves in 1953 and 1954 but not in other years. The Newfoundland adjustment has been arbitrarily allocated 50 percent to Sector I, 40 percent to Sector II, and 10 percent to Sector III. The adjustments for hidden reserves are based upon the average distribution of outstanding loans. Since the loan classification was not available at December 31st until 1947, some arbitrary estimation was required in the first two years, taking into account the change in total bank loans, the classifications at October 31st and the sales of Victory and Canada Savings Bonds.

CATEGORY C3 (b). OTHER LOANS

Included in this category are loans except the loans of chartered banks. Some of the more important items are loans to other national governments, to international organizations, and to provincial and municipal governments by the Government of Canada; the policy loans of life insurance companies and fraternal benefit societies; credit union loans; the loans of small loan companies; the loans of provincial governments to municipal governments.

The information on Government of Canada and provincial government loans is obtained from the Public Accounts. The extensive to-whom from-whom detail is derived from the various sector and subsector accounts, though certain arbitrary assumptions have been made. The split of credit union loans between Sectors I and II is the same as that used in the consumer credit statistics published in the Bank of Canada *Statistical Summary*. The loans of other government savings institutions are split fifty-fifty between Sectors I and III. All loans by small loan companies are assumed to be made to consumers.

CATEGORY C4 (a). CLAIMS ON ASSOCIATED ENTERPRISES — NON-CORPORATE

This category provides the link between the consumer and the business aspects of individuals' transactions. It is the balancing item in the Sector II account, and appears in the Sector I account also as an indication of the increase or decrease in the equity of individuals in their businesses. Its nature is conventional, however, and its size depends upon the assumptions one makes as to what transactions are business. The unincorporated business account is constructed by including only transactions which can be specifically identified as business transactions, and by assuming that all net earnings of the business are paid out to the owner. Thus unincorporated business has no liquid assets, and it saves only an amount equal to depreciation. Furthermore, residential construction and mortgage borrowing are treated as business activities. All these conventions affect the equity in the business and its rate of increase.

Another consequence of this treatment is that the Sector II account can contain no residual; any errors of estimation are transferred to Sector I through this account, and are thus included in the Sector I residual.

CATEGORY C4 (b). CLAIMS ON ASSOCIATED ENTERPRISES — CORPORATE

In this category are recorded financial transactions between parent companies and their subsidiaries. Their financial interrelationships may take the form of stocks, bonds, loans, or accounts payables; but the special significance of parent-subsidiary transactions merits their segregation in this category. The transactions recorded are in fact largely of a long term nature.

The major items included here are investment by non-financial corporations in their subsidiaries, and direct investment in Canadian non-financial corporations by foreign parent companies. Other transactions of significance are the investment of Canadian chartered banks and life companies in their foreign branches, the investment of non-residents in Canadian instalment finance and small loan companies, and the investment of instalment finance companies in subsidiary small loan companies.

The Sector III debits have been estimated from *Taxation Statistics,* while Sector III credits have been obtained as a residual after all other transactions in this category have been estimated. While the parent organization normally distinguishes investment in subsidiaries from other investments, the subsidiary does not tend to divide its liabilities between stocks and bonds owned by the parent and owned by others.

Other debits and credits are taken from the sector sources.

CATEGORY C4 (c). CLAIMS ON ASSOCIATED ENTERPRISES — GOVERNMENT

This category is similar to C4(b), and includes the claims of governments on their enterprises and the claims of government enterprises on their subsidiaries.

In some cases, the enterprise reports larger liabilities under loans and investments than the parent government reports assets. This occurs when the government has charged material and equipment to current expenditure and then transferred these assets to the enterprise. The enterprise capitalizes them, however, and shows a corresponding liability. In order to maintain balance in this category, the transfer of the assets to the enterprise has been entered as a sale of existing assets and an equivalent claim upon the enterprise. When the advance is repaid, the government includes in current revenue an allowance for 'refund of previous expenditure'; and again this treatment is modified by eliminating the revenue entry and entering a reduction in the claim on the enterprise in this category. Such repayments are particularly important in connection with the liquidation of the wartime corporations.

Government enterprises with the exception of the Canadian Wheat Board retain none of their profits after depreciation in the conceptual framework of the National Accounts. The difference between the profits earned and the profits actually transmitted to the parent government in the year is therefore included as a credit in this category. Accrued corporate income taxes, which have been levied on federal government enterprises since 1952, are not included here however, but rather under payables in the same way as the accrued taxes of private corporations.

CATEGORY C5. MORTGAGES

Loans secured by real property mortgages and in some cases by chattel mortgages, and agreements of sale are recorded in this category; mortgage bonds are not included, appearing under the appropriate bond category.

Intensive study of these transactions has been made by members of the staff of Central Mortgage and Housing Corporation, who have been most helpful in the preparation of these estimates.[5] Some of these estimates have not previously been published, and should be taken only as indications of the orders of magnitude. In some cases, an estimate can be made directly from the sector sources, but in others the distinction between mortgage and other transactions could only be made with their advice.

One of the features of this account is the imputation of all mortgage borrowing by persons to Sector II rather than Sector I. Owner-occupiers are deemed to buy and finance their houses in a business role, and rent their homes to themselves as consumers. The only mortgage transaction in

[5] *Mortgage Lending in Canada* and *Housing in Canada* published by C.M.H.C. contains much information in this field.

which consumers engage is mortgage lending. Such debits can occur for investment purposes, and include the acquisition of mortgages by private pension funds and estates, trust and agency funds administered by trust companies, all of which are included in this sector; and may also occur when an individual sells his house and provides some finance to the new buyer, normally in the form of a second mortgage. The estimate of such mortgage lending by persons, and of non-financial corporations' mortgage transactions was supplied by C.M.H.C. Sector II's mortgage borrowing was calculated residually in order to balance total debits and total credits in the category.

CATEGORY C6. BONDS and C7. STOCKS

Before discussing these categories in detail, one or two general comments are necessary. In numerous instances it has proved difficult to distribute the investments held by transactors between the various types of bonds and stocks, more or less arbitrary methods of estimation being required. Care should be taken to check with the notes on the sector account before placing too much reliance on the investment patterns shown for specific sectors or subsectors. In the case of the non-financial corporate sector, data on the holdings of Government of Canada bonds could be found, but there seemed no way of splitting other investments and thus only a single total is shown in each year for C6(b-d) and C7. Since the consumer sector's transactions in these categories are derived residually, a similar grouping is necessary there as well. In the following tables, a combined debit for Sectors I and III is shown in each sub-category except C6(a), being the difference between total credits and the debits of Sectors IV-XI inclusive, and these are subsequently combined and allocated in toto to Sectors I and III separately.

Bonds are classified into the four sub-categories according to whether they have been issued *or guaranteed* by the Government of Canada, Provincial Governments, Municipal Governments or others. For example, a bond issued by the C.N.R. but guaranteed by the Government of Canada is classified as a Government of Canada bond. The reason for this method of classification, which is generally adopted in existing financial statements and statistics, is that a bond which is guaranteed by a government acquires the character of that government's bonds in the eyes of investors, even though it is someone else's primary liability.

It is in the field of bonds and stocks that the largest difficulties arise in moving from changes in balance sheet entries to transactions on a purchase or sale price basis, and the discussion of valuation on pages 488-90 is particularly relevant to these categories.

CATEGORY C6 (a). GOVERNMENT OF CANADA BONDS

Government of Canada bonds are defined to include Treasury Bills, Treasury Notes and Deposit Certificates; other unmatured market issues; non-market debt, including Canada Savings Bonds, War Savings Certificates and Refundable Tax; matured and outstanding debt; and guaranteed unmatured funded debt. Par values have been adjusted by the deduction of discounts below par at the time of issue, and foreign currency issues and retirements have been expressed at the current rate of exchange.

Debits have been estimated from sector sources, except in the case of Sector I which is estimated residually.

CATEGORY C6 (b). PROVINCIAL BONDS

The methods of estimating the credit entries in this category were as follows:

Sector IV: Government Enterprises. The net new issues of provincially guaranteed bonds were obtained from the detailed records of bond issues and retirements maintained by the Bank of Canada. The largest issuers are of course Ontario Hydro and Quebec Hydro. The differences between the series derived in this manner and the series obtained from the reports of the companies were mostly accounted for by the fact that Ontario Hydro's fiscal year ended on October 31st until 1950 when the calendar year basis was adopted.

Sector IX: Provincial Governments. Two separate methods of calculating the changes in the funded debt of provincial governments were used.

(1) *1946-1951.* During this period, estimates published by the Bank of Canada included additions to sinking funds as retirements. It was not possible in the time available to obtain satisfactory reconciliations between this series and changes in funded debt recorded from the *Public Accounts.* The following approach was therefore used. Changes in funded debt excluding Treasury Bills were recorded from Provincial Government Sector worksheets on a fiscal year basis. A calendar year adjustment was then calculated from the Bank of Canada records and applied to the fiscal year series. Changes in Treasury Bills from the sector worksheets were then included to give the change in total debt. It should be noted that Treasury Bills issued directly by the Provincial Governments to the banks and to the Federal Government are not included in this category, but in loans.

(2) *1952-1954.* In this period, the new issue and retirement data collected by the Bank of Canada exclude sinking fund transactions and were used, after the addition of Treasury Bill transactions as before.

Sector X: Municipal Governments. Changes in the estimates of municipal debt guaranteed by the provinces contained in D.B.S. *Financial Statistics of Provincial Governments* were used.

Bonds issued by charitable organizations and guaranteed by the provinces are excluded, since the amounts involved were small, and the information available incomplete. The issues of such organizations are further discussed in C6(d) below.

The various sources from which the net issues of provincial direct and guaranteed securities were taken are not wholly consistent, particularly insofar as the calendar year adjustments are concerned. Where such adjustments are made, they are only approximate, and the issues of municipalities are on a fiscal year basis, which is not in all cases the same as a calendar year basis. Estimates of the issues of government enterprises should be the most exact. It is to be hoped that further work on the reconciliation of the various sources of data can be carried out at some future date.

CATEGORY C6 (c). MUNICIPAL BONDS

Net new issues of unguaranteed Municipal bonds by municipalities have been estimated by deducting the amount of provincially guaranteed issues from the total derived from D.B.S. *Financial Statistics of Municipal Governments.* Issues of the Quebec Municipal Commission are included because the lack of data prevents their removal.

CATEGORY C6 (d). OTHER BONDS

Included here are the net new issues of Canadian companies and the transactions in foreign securities. The credits of Sector IV and Sector VII were derived from the sector sources; in the case of Federal Government enterprises, the transactions consist of the net new issues of non-guaranteed securities, notably equipment trust certificates, by the C.N.R., and in the case of provincial enterprises, the principal transactions are the retirement of outstanding issues of Montreal Light, Heat and Power Company and Beauharnois Light, Heat and Power Company, following their purchase by the Quebec Hydro-Electric Commission. The issues of financial enterprises do not include the change in the outstanding guaranteed investment certificates and loan debentures of trust and loan companies which are classified as 'other institutional deposits'. Estimates of Sector III credits were derived by adding the short term issues of instalment finance companies to the net new issues of corporate bonds and debentures as published by the Bank of Canada, and then deducting the credits of Sector IV and Sector VII.

The net purchases of foreign bonds by Canadians is estimated from the Balance of Payments. The largest proportion of these transactions is

the purchase of short term U.S. government obligations by the Bank of Canada and the Exchange Fund.

Net new issues of bonds by such non-profit institutions as religious and educational institutions should be included in the Sector I account, but have been omitted for lack of data. Some such issues are recorded in the new issue and retirement data published in the Bank of Canada *Statistical Summary* but the coverage is known to be incomplete. Since the debits of Sector I are calculated residually, the amounts of such issues are in effect omitted from both sides of that sector's accounts.

CATEGORY C7. STOCKS

In this category are included transactions in preferred and common stocks. Sector III credits are obtained from the Bank of Canada series of net new issues of preferred and common stocks, after adjustment for items included elsewhere. Other credit items are taken from the sector sources. Where part of the proceeds of an issue is accounted for in the balance sheet as capital surplus paid in rather than as an addition to the capital account, it is included in this category; see for example the treatment of new issues by the chartered banks.

CATEGORY C8. INSURANCE AND PENSIONS

This category was designed to include all consumer contractual saving via the acquisition of rights in life insurance, pension and annuity contracts, but in fact the coverage of this type of transaction is quite incomplete. The principal transactions included are savings entrusted to life insurance companies and fraternal benefit societies and net purchases of Federal Government Annuities. Savings going into private pension funds are only included to the extent that such funds are invested in the group annuity contracts sold by the former agencies; where the pension fund is administered by trustees who invest the inflow of funds directly in securities, the contractual saving is not recorded and the investments appear as if they were made directly by consumers.

Life insurance savings are defined as premiums paid less claims received plus the investment income earned by the companies' and societies' assets less their administrative expenses and profit. Thus they represent the whole gain of policyholders in the equity of their contracts, and are consistent with the concepts employed in the national income and expenditure accounts.

The omission of private pension funds from the catalogue of financial institutions is a very serious one, and adds further difficulty to the interpretation of the consumer sector's accounts. A survey of this field was made in 1953, and the results were published in D.B.S. Reference Paper No. 54. *Survey of Canadian Trusteed Pension Funds, 1953*. No continuous

data for the period are available, however, and this is a serious shortcoming of Canadian financial statistics.

The transactions of government pension funds are also excluded, but in this case more for conceptual than statistical reasons. In the National Accounts, personal income is defined as including the salaries of government employees *less* their contributions to pension and superannuation funds *plus* the receipts of pensions by retired civil servants. The excess of contributions over benefits is thus defined as part of government saving rather than personal saving; and so this treatment is quite different from the treatment of non-government pension transactions.

In certain cases, pension liabilities were observed on the statements of employers without any corresponding assets which could be netted out against them. Such liabilities are small and normally arise only where the establishment of independent funds are being prepared or where new employees serve a probationary period before qualifying for the pension plan; they are included in this category.

CATEGORY C9. FOREIGN INHERITANCES AND MIGRANTS' FUNDS

This category covers those transactions rising out of transfers of funds by immigrants and by inheritances from Canada to the Rest of the World and from the Rest of the World to Canada. The Balance of Payments treats these items as well as the more current remittances of income to friends and relatives as current account transactions, but the National Accounts regard them as capital transfers, and hence not as part of current income or expenditure. They are consequently treated here as financial transactions in the National Transactions Accounts. Should other types of transfer payments, such as the payment of succession duties, be treated as capital rather than current transfers, this category could be widened to include them as well.

CATEGORY D. OTHER TRANSACTIONS AND ERRORS

(a) Transfers of Existing Real Assets
(b) Special Deposit and Trust Accounts
(c) Recorded Receivables and Payables
(d) Unclassified Transactions
(e) Residual

This is the remaining area of the category classification. A single total for 'Other Transactions and Errors' is shown in the matrix tables for each sector; here, and in the sector and subsector accounts, further detail is provided on existing assets, special deposit and trust accounts, receivables and payables, unclassified transactions and the residual, although the distinctions are frequently very questionable. Total debits and total credits

in the D account are equal — a necessary consequence of the equality of total debits and total credits in all the sectors and all the other categories (A5, B2 and B3 being taken together). This equality does not hold however within four of these sub-headings.

(a) Transfers of Existing Real Assets are transactions which are very difficult to handle in any statistical system. The estimates which actually appear under this heading are derived as follows. For non-financial corporations, changes in the 'Land' account in *Taxation Statistics,* appropriately adjusted as described in the Sector account, are used. For Government business enterprises and the various financial sectors, (except for life insurance where direct estimates are made) the estimates emerge from the reconciliation of the official statistics of gross new capital formation and the fixed assets account in the sector's own records, it being assumed that the difference between the change in fixed assets before depreciation and new investment is accounted for by existing asset transfers. The fact that it is residually estimated in this way, however, automatically introduces all the error and lack of comparability in the two sources. All these estimates are net debits. For the Federal and Provincial governments, separate debit and credit estimates are made, and are probably the firmest figures in this classification, mainly because of the extensive study of such transactions which was made in the development of the national income and expenditure accounts. Specific types of government transactions in existing assets are the sale of surplus war assets, the sale of mineral rights, and especially oil leases by the Provincial Governments, and transfers between Governments and their enterprises.

Clearly, this is far from being a complete catalogue of all types of existing asset transfers in the economy. In particular, no estimates are made of transactions in land, existing houses, used cars and commercial property by consumers and unincorporated businesses, since no satisfactory basis of such estimates could be discovered; such transactions must be deemed to comprise a part of the consumer sector residual. While some entries are made in the corporate sector, these are evidently incomplete and whether transactions in land can be measured at all accurately from the existing sources is open to some question.

(b) Special Deposit and Trust Accounts. There are numerous situations in which one transactor places funds with another transactor on an agency, trustee or safekeeping basis. In most of these situations, the transactor accepting the funds earmarks specific assets against his liability. Perhaps the cash or securities deposited are held in unchanged form, perhaps the depositee also has the right and duty to vary the form in the best interests of the depositor; but in either case specific assets are earmarked against specific liabilities. In these cases, both the debit and credit transactions are eliminated from the account of the institution

holding the funds, and the depositor is deemed to buy or sell the ultimate assets directly for his own account. The largest block of such funds incidentally are in the hands of the Trust Companies and described in their reports as 'Funds under Administration' or 'Estates, Trust and Agency Funds'.

There are situations, however, in which no specific assets are earmarked against the liabilities. This type of transaction provides a general source of funds to the depositee, and has been included in this sub-category. Specific examples are the Unearned Service Charges and Dealers' Credit Balances on the books of Instalment Finance companies, contractors' holdbacks, certain deposits of government enterprises with their parent governments, and such deposits with the Federal Government as the Newfoundland financial surplus, Post Office Savings Bank funds, Paylist Deductions and Indian Trust Funds.

Total debits equal total credits in this sub-category and thus the transactions are completely recorded; but it has not been included as a separate line in the C account, since the amounts involved are relatively small and the coverage is not particularly significant; the common characteristic that assets are not earmarked against these liabilities is not a very interesting one.

The remaining sub-headings are recorded receivables and payables, unclassified transactions and the residual. It is a particular weakness of the present state of the accounts that a more systematic and accurate recording of receivables and payables has not been achieved. Consumer charge accounts have been removed and recorded specifically because they are especially interesting and reasonably well documented, but other 'trade credit' which includes taxes, interest, dividends and rents payable as well as the amounts due and accrued on other transactions are very sketchily treated. The critical series is perhaps the balance of credit between unincorporated business and corporations, and no reasonable method of estimating it could be discovered. It may be suggested that this amount could be derived residually from the balance of transactions of other sectors, in the same way as most of the other Sector I and Sector II transactions are in fact estimated. But this has seemed too reckless a procedure in view of the uncertainty surrounding such estimates elsewhere. For some of these other sectors, estimates will be found in their accounts, and in the case of the financial institutions they can be used with some confidence; for the corporate sector, an estimate is based on *Taxation Statistics* with some adjustment as explained in the sector notes, but these credit transactions are particularly volatile and the problems of timing in this source are likely to be particularly serious here. In the case of governments, only special types of receivables and payables in connection with taxes and interest can be estimated, and these not at all completely. In addition to these particular difficulties, there is the general

one that trade credit is influenced by float, as described on page 490 above. This is an area in which a great deal of further investigation is required, and at the present stage of knowledge, it appeared wise to group receivables and payables with the other sub-categories appearing in the D account, in order to underline the lack of any consistent set of distinctions within this general area.

In some balance sheets which have been used in deriving the transactions accounts, such headings as 'other assets' and 'other liabilities' were encountered, and changes in these were entered as unclassified transactions, together with other minor items which could not be fitted into any of the standard categories. The residuals on the other hand are simply balancing items, which are entered in the credit column in these accounts as a matter of convention.

Where the estimates for a sector or subsector have been derived entirely from a single source such as a set of balance sheets, the residuals will reflect only rounding error; but where such a source has been supplemented by independent information on one or more categories, which appears more reliable, the balance will be destroyed and the residual will reflect the difference between the balance sheet estimates and those which are substituted for them. In the case of non-financial corporations, for example, recorded receivables and payables are derived after some modification from the corresponding *Taxation Statistics* categories, and unclassified transactions from 'other assets' and 'other liabilities', while the residual results from the use of independent estimates of depreciation, other saving, capital formation, loans, claims on associated enterprises, and bond and stock liabilities in place of *Taxation Statistics* categories. For Sector I, of course, all the category estimates are independent in this sense, and the residual reflects all the errors and omissions in the rest of the account. The size of this residual is perhaps the best single indication of the coherence and quality of the whole system of accounts. These residuals are large, particularly in 1950 and 1954, when personal saving was unusually low.

CONSUMER SECTOR

Year	Personal Saving	N.T.A. Residual	Total
1946	890.0	42.4	932.4
47	494.0	187.2	681.2
48	994.0	-278.7	705.3
49	926.0	- 58.5	984.5
50	662.0	644.1	1,306.1
51	1,334.0	63.1	1,397.1
52	1,291.0	485.9	1,776.9
53	1,312.0	302.6	1,614.6
54	809.0	715.1	1,524.1

When personal saving and the residual are combined, the resulting series represents the balance of debits over credits in all other B and C account categories and appears rather smoother than personal saving itself. The question remains open, however, whether the method of estimating saving by deducting expenditures from income overstates its volatility, whether the crude methods of estimating the investment and financial transactions of individuals understate their variability, or whether the lack of any measures of real asset transfers and trade credit is responsible for the difference.

In the case of the non-financial corporate sector, the N.T.A. residual is affected by the treatment of the residual error of the National Accounts:

Year	N.T.A. Residual (credit)	Residual Error of National Accounts (debit)	Difference (credit)
1946	-337.6	62.0	-275.6
47	178.7	-54.0	124.7
48	96.0	-178.0	- 82.0
49	303.6	-87.0	216.6
50	-148.3	-136.0	-284.3
51	113.8	-180.0	- 66.2
52	-796.0	403.0	-393.0
53	-409.8	284.0	-215.8
54	-376.0	- 26.0	-402.0
Average, 1946-54	-162.9	9.8	-153.1

The third column in the above table contains the residual which would result if the Sector III saving were given its truer directly measured value as opposed to the value which results from the income-expenditure subtraction. While the average over the nine year period is little changed, the magnitude of the residual is reduced in seven of the years, and the largest residuals are reduced. It appears therefore that the N.T.A. residual is increased by the inclusion of the residual error of the National Accounts.

When interpreting the residuals, however, it is most necessary to bear in mind that certain important types of transactions have not been completely measured, and the extent to which transactions in real assets and receivables and payables have been distinguished from the residual varies widely from sector to sector.

SECTOR I: CONSUMERS

Current Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Debits (Expenditures)											
A 1 Labour Service	168	191	230	262	276	318	356	396	433	447	474
A 4 Transfers Including Taxes	945	972	1,046	1,028	996	1,366	1,698	1,842	1,859	1,940	2,210
A 5 Goods and Services, n.e.i. (Net)	7,863	8,899	9,855	10,661	11,750	13,142	14,425	15,196	15,742	17,017	18,223
A 6 Gross Saving	892	494	994	926	662	1,334	1,291	1,312	809	865	1,541
Total Debits	9,868	10,556	12,125	12,877	13,684	16,160	17,770	18,746	18,843	20,269	22,448
Credits (Receipts)											
A 1 Labour Service	5,827	6,482	7,496	8,115	8,766	10,304	11,478	12,419	12,799	13,609	15,143
A 2 Capital Service	817	959	998	1,043	1,268	1,333	1,418	1,551	1,719	1,911	2,125
A 3 Proprietors' Service	2,106	2,259	2,747	2,748	2,595	3,464	3,488	3,287	2,665	2,990	3,385
A 4 Transfers Including Taxes	1,118	856	884	971	1,055	1,059	1,386	1,489	1,660	1,759	1,795
Total Credits	9,868	10,556	12,125	12,877	13,684	16,160	17,770	18,746	18,843	20,269	22,448

SECTOR I: CONSUMERS

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	703.6	198.8	526.5	224.7	156.3	255.7	538.6	146.3	680.2
	(c) Other Institutional Deposits	121.2	75.2	84.2	84.2	74.3	77.3	119.0	99.7	240.8
C 4	Claims on Associated Enterprises									
	(a) Non-Corporate	118.1	143.6	208.8	305.7	407.0	541.2	601.9	508.1	85.2
C 5	Mortgages	67.0	92.0	151.0	177.0	205.0	108.0	198.0	256.0	436.4
C 6	Bonds									
	(a) Government of Canada Bonds	—255.3	—62.0	—528.8	—297.0	71.8	—220.3	122.9	296.7	—201.6
	(b) Provincial Bonds (c) Municipal Bonds (d) Other Bonds	52.8	116.9	135.6	232.9	352.1	301.5	211.0	263.0	—12.5
C 7	Stocks	—	—	—	—	—	—	—	—	—
C 8	Insurance and Pensions	254.7	314.3	305.9	307.6	322.1	308.9	350.8	378.3	416.2
C 9	Foreign Inheritances and Migrants' Funds	35.0	49.0	50.0	59.0	61.0	70.0	144.0	116.0	94.0
D	Other Transactions and Errors									
	(b) Special Deposit and Trust Accounts	5.5	12.6	4.8	6.0	18.6	5.5	39.8	31.4	9.3
	Total Debits	1,102.6	940.4	938.0	1,100.1	1,668.2	1,447.8	2,326.0	2,095.5	1,748.0

SECTOR I: CONSUMERS

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)										
B 1	Gross Saving									
	(b) Other Saving	892.0	494.0	994.0	926.0	662.0	1,334.0	1,291.0	1,312.0	809.0
C 2	Charge Accounts and Instalment Credit									
	(a) Consumer Charge Accounts	27.0	70.0	36.0	19.8	26.9	28.7	25.1	31.0	23.4
	(b) Instalment Credit	28.0	68.3	43.9	80.0	124.2	—92.7	307.2	184.1	13.6
C 3	Loans									
	(a) Bank Loans	7.0	21.0	31.5	23.9	110.5	—18.8	75.5	113.1	15.9
	(b) Other Loans	41.2	30.9	27.3	40.9	43.5	56.5	56.3	61.7	82.0
C 9	Foreign Inheritances and Migrants' Funds	65.0	69.0	84.0	68.0	57.0	77.0	85.0	91.0	89.0
D	Other Transactions and Errors									
	(e) Residual	42.4	187.2	—278.7	—58.5	644.1	63.1	485.9	302.6	715.1
	Total Credits	1,102.6	940.4	938.0	1,100.1	1,668.2	1,447.8	2,326.0	2,095.5	1,748.0

SECTORS II-VII: BUSINESS

Current Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Debits (Expenditures)											
A 1 Labour Service	4,706	5,545	6,415	6,866	7,423	8,696	9,582	10,323	10,454	11,089	12,391
A 2 Capital Service	909	1,048	1,081	1,197	1,578	1,649	1,723	1,831	2,013	2,306	2,616
A 3 Proprietors' Service	2,106	2,259	2,747	2,748	2,595	3,464	3,488	3,287	2,665	2,990	3,385
A 4 Transfers Including Taxes	1,965	2,362	2,515	2,596	3,062	3,968	4,183	4,213	4,113	4,613	5,129
A 6 Gross Saving	1,316	1,260	1,447	1,950	2,321	2,030	3,592	3,651	3,544	3,861	4,166
Total Debits	11,002	12,474	14,205	15,357	16,979	19,807	22,568	23,305	22,789	24,859	27,687
Credits (Receipts)											
A 5 Goods and Services, n.e.i. (Net)	11,002	12,474	14,205	15,357	16,979	19,807	22,568	23,305	22,789	24,859	27,687
Total Credits	11,002	12,174	14,205	15,357	16,979	19,807	22,568	23,305	22,789	24,859	27,687

SECTOR II: UNINCORPORATED BUSINESS

Investment and Financial Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
B 2 Change in Inventories	101.0	49.0	—4.0	—33.0	197.0	335.0	344.0	179.0	—46.0
B 3 Gross Fixed Capital Formation									
(a) Residential	335.0	467.0	540.0	713.0	823.0	845.0	873.0	1,092.0	1,158.0
(b) Non-Residential	323.0	485.0	637.0	752.0	845.0	890.0	901.0	1,017.0	886.0
C 2 Charge Accounts and Instalment Credit									
(a) Consumer Charge Accounts	11.0	30.0	16.3	8.0	12.1	9.1	7.5	12.8	9.8
(b) Instalment Credit	5.5	12.0	5.0	12.5	16.7	—21.9	33.4	10.4	11.6
Total Debits	775.5	1,043.0	1,194.3	1,452.5	1,893.8	2,057.2	2,158.9	2,311.2	2,019.4
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	477.0	544.0	625.0	742.0	857.0	993.0	1,045.0	1,111.0	1,170.0
C 2 Charge Accounts and Instalment Credit									
(b) Instalment Credit	14.0	39.3	1.6	9.0	23.2	36.8	39.3	18.3	19.6
C 3 Loans									
(a) Bank Loans	22.0	130.0	41.9	24.3	122.4	66.0	46.0	119.0	18.8
(b) Other Loans	— 5.7	—17.6	1.8	1.7	3.3	10.6	30.5	10.5	18.0
C 4 Claims on Associated Enterprises									
(a) Non-Corporate	118.0	143.6	208.8	305.7	407.0	541.2	601.9	508.1	85.2
C 5 Mortgages	150.1	203.7	315.2	369.8	480.9	409.6	396.2	544.3	747.0
Total Credits	775.5	1,043.0	1,194.3	1,452.5	1,893.8	2,057.2	2,158.9	2,311.2	2,019.4

SECTOR III: NON-FINANCIAL CORPORATIONS

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 2	Change in Inventories	263.2	316.5	20.1	62.1	243.2	544.5	36.8	233.1	—47.3
B 3	Gross Fixed Capital Formation									
	(a) Residential	18.0	25.0	28.0	38.0	43.0	44.0	46.0	57.0	61.0
	(b) Non-Residential	595.2	922.1	1,085.5	1,096.9	1,188.0	1,651.0	2,034.8	2,146.4	1,981.9
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	39.9	21.3	101.5	67.9	117.6	—117.0	126.2	75.7	116.1
	(c) Other Institutional Deposits	20.2	11.7	14.1	15.0	14.4	11.0	11.4	6.9	65.7
C 2	Charge Accounts and Instalment Credit									
	(a) Consumer Charge Accounts	16.0	40.0	19.7	11.8	14.8	19.6	17.6	18.2	13.6
	(b) Instalment Credit	7.5	32.0	17.0	22.5	21.7	—54.1	86.4	31.2	27.2
C 4	Claims on Associated Enterprises									
	(b) Corporate	291.2	396.0	150.2	207.9	400.1	416.7	604.9	465.1	355.7
C 5	Mortgages	— 4.0	— 1.0	— 1.0	—	2.0	3.0	4.0	2.0	8.2
C 6	Bonds									
	(a) Government of Canada Bonds	—232.1	—148.3	—105.7	— 4.7	136.7	—89.6	—187.0	—11.5	—33.0
	(b) Provincial Bonds (c) Municipal Bonds (d) Other Bonds	—118.1	—81.3	— .1	1.3	—36.8	68.8	180.5	221.8	164.0
C 7	Stocks	—	—	—	—	—	—	—	—	—
D	Other Transactions and Errors	181.5	264.7	293.8	201.8	693.4	733.9	468.8	555.7	659.3
	(a) Transfers of Existing Real Assets	—	—	62.5	95.1	72.3	84.9	87.3	167.6	183.6
	(b) Special Deposit and Trust Accounts	1.0	1.3	5.5	2.1	4.1	5.8	5.3	— 4.4	— .1
	(c) Recorded Receivables	182.5	258.4	219.2	134.0	529.7	490.7	138.6	256.3	359.4
	(d) Unclassified Transactions	— 2.0	5.0	6.6	—29.4	87.3	152.5	237.6	136.2	116.4
	Total Debits	1,078.5	1,798.7	1,623.1	1,720.5	2,838.1	3,231.8	3,430.4	3,801.6	3,372.1

SECTOR III: NON-FINANCIAL CORPORATIONS

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)										
B 1	Gross Saving									
	(a) Capital Consumption Allowances, etc.	415.0	576.1	695.4	789.8	896.8	1,025.5	1,177.8	1,341.5	1,507.1
	(b) Other Saving	196.3	20.4	257.2	419.6	328.8	—32.1	668.2	645.7	582.7
	(c) Residual Error of the National Accounts	62.0	—54.0	—178.0	—87.0	—136.0	—180.0	403.0	284.0	—26.0
C 3	Loans									
	(a) Bank Loans	69.1	252.7	69.8	4.0	224.1	206.5	92.7	345.4	37.9
	(b) Other Loans	6.0	— .9	—2.9	—4.0	1.8	30.2	27.0	15.0	4.3
C 4	Claims on Associated Enterprises									
	(b) Corporate	298.3	450.3	222.3	293.5	630.4	679.3	849.6	800.0	655.8
	(c) Government	—	—	1.4	.5	.4	.1	.7	1.0	.6
C 5	Mortgages	18.0	70.0	39.0	58.0	65.0	101.0	82.0	82.0	186.0
C 6	Bonds									
	(d) Other Bonds	15.9	197.8	134.2	167.2	292.4	261.0	390.8	268.4	400.3
C 7	Stocks	69.2	—13.4	48.3	43.7	143.7	181.3	227.4	210.6	99.2
D	Other Transactions and Errors	—71.3	299.7	336.4	35.2	390.7	959.0	—488.8	—192.0	—75.5
	(c) Recorded Payables	136.3	381.7	106.8	— 2.1	559.8	620.7	119.0	131.8	52.7
	(d) Unclassified Transactions	130.0	—260.7	133.6	—266.3	—20.8	224.5	188.2	176.0	247.8
	(e) Residual	—337.6	178.7	96.0	303.6	—148.3	113.8	—796.0	—499.8	—376.0
	Total Credits	1,078.5	1,798.7	1,623.1	1,720.5	2,838.1	3,231.8	3,430.4	3,801.6	3,372.4

SECTOR IV: GOVERNMENT BUSINESS ENTERPRISES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 2	Change in Inventories	—31.2	37.5	95.4	20.0	110.9	34.6	131.2	170.9	—36.7
B 3	Gross Fixed Capital Formation									
	(b) Non-Residential	94.3	173.8	272.1	369.8	405.4	485.2	552.8	631.7	638.7
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	79.8	—10.6	17.8	—47.6	25.7	12.0	9.8	—50.7	—2.4
	(c) Other Institutional Deposits	—	—	—	—	—	—	—	.3	.1
C 3	Loans									
	(b) Other Loans	—	—	—	—	—	2.5	3.2	— .4	.6
C 4	Claims on Associated Enterprises									
	(c) Government	22.7	58.6	1.5	49.3	—14.1	—3.8	30.0	—116.9	7.3
C 5	Mortgages	— .1	— .4	.2	— .1	.2	1.7	— .2	.2	— .1
C 6	Bonds									
	(a) Government of Canada Bonds	47.5	41.1	—63.8	—59.0	—4.0	—23.8	.1	7.0	29.3
	(b) Provincial Bonds	6.7	31.3	—22.2	—16.9	—10.2	—4.1	22.1	—33.3	25.7
	(c) Municipal Bonds	2.3	—2.0	— .8	3.5	—1.4	—2.7	—9.4	10.7	9.1
	(d) Other Bonds	— .5	— .7	— .1	—	— .8	—	—	1.0	—1.6
C 7	Stocks	—	3.1	— .2	—1.1	—1.2	— .3	.6	—	—
D	Other Transactions and Errors	—179.8	3.6	10.5	18.2	—12.1	59.7	90.2	107.7	40.8
	(a) Transfers of Existing Real Assets	—174.5	3.4	11.0	—20.1	—1.6	12.0	24.9	20.6	18.9
	(b) Special Deposit and Trust Accounts	2.2	—2.1	—	2.2	—1.3	— .9	.8	3.7	3.4
	(c) Recorded Receivables	—7.3	.8	—1.9	36.1	—8.2	47.1	63.2	83.2	8.6
	(d) Unclassified Transactions	— .2	1.5	1.4	—	—1.0	1.5	1.3	.2	9.9
	Total Debits	41.7	335.3	310.4	336.1	498.4	561.0	830.4	728.2	710.8

SECTOR IV: GOVERNMENT BUSINESS ENTERPRISES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)										
B 1	Gross Saving									
	(a) Capital Consumption Allowances, etc.	100.0	97.0	112.0	130.0	145.0	169.0	184.0	205.0	211.0
	(b) Other Saving	22.0	34.0	—100.0	—111.0	166.0	—12.0	43.0	—24.0	8.0
C 3	Loans									
	(a) Bank Loans	.8	.9	5.0	26.5	—17.5	15.9	—19.6	31.8	32.1
	(b) Other Loans	—	—	—	—	1.1	—1.1	—	—	—
C 4	Claims on Associated Enterprises									
	(c) Government	—63.7	58.9	156.7	106.8	45.6	374.5	302.6	263.8	—70.9
C 5	Mortgages	—	—	—	—	—	—	.6	—	— .6
C 6	Bonds									
	(a) Government of Canada Bonds	—38.6	50.8	—46.4	28.3	28.7	—47.6	— .2	—	388.1
	(b) Provincial Bonds	17.9	156.5	112.4	166.7	103.1	20.6	205.6	107.2	187.7
	(c) Municipal Bonds	— .1	—	— .6	—	—	— .2	—	—	—
	(d) Other Bonds	—22.3	—102.9	47.9	—25.8	7.5	—2.7	—11.4	—15.7	—10.3
C 8	Insurance and Pensions	.5	— .3	.8	—1.8	— .2	.3	1.7	—1.7	.2
D	Other Transactions and Errors	25.2	40.4	22.6	16.4	19.1	44.3	124.1	161.8	—34.5
	(b) Special Deposit and Trust Accounts	1.1	—1.4	.5	.9	— .2	— .1	—3.9	2.1	2.8
	(c) Recorded Payables	64.4	26.8	80.6	.1	—28.3	40.6	162.0	154.7	—60.5
	(d) Unclassified Transactions	—4.7	— .7	— .8	5.5	—5.8	3.7	— .8	—2.0	9.5
	(e) Residual	—35.6	15.7	—57.7	9.9	53.4	.1	—33.2	7.0	13.7
	Total Credits	41.7	335.3	310.4	336.1	498.4	561.0	830.4	728.2	710.8

SUBSECTOR IV (a): FEDERAL ENTERPRISES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 2	Change in Inventories	—43.5	17.0	73.2	—5.1	88.5	26.3	127.5	172.6	—30.1
B 3	Gross Fixed Capital Formation									
	(b) Non-Residential	40.1	63.3	89.0	84.0	60.0	111.0	153.0	148.0	186.4
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	65.8	—6.4	16.1	—69.0	26.7	14.4	12.2	—63.3	8.6
	(c) Other Institutional Deposits	—	—	—	—	—	—	—	.3	.1
C 4	Claims on Associated Enterprises									
	(c) Government	3.1	17.3	2.6	— .7	— .8	11.3	4.1	—2.4	6.3
C 5	Mortgages	— .2	— .3	— .3	— .4	— .1	.9	— .7	— .9	— .2
C 6	Bonds									
	(a) Government of Canada Bonds	53.1	37.0	—71.4	—56.7	8.5	—17.7	—1.6	6.3	23.5
	(b) Provincial Bonds	—	— .4	—	—	6.0	— .3	1.3	.9	4.1
	(d) Other Bonds	— .3	.6	.2	—	— .8	—	—	—	—3.4
D	Other Transactions and Errors	—184.4	—40.9	—15.1	—8.1	—31.3	49.8	85.3	93.5	32.2
	(a) Transfers of Existing Real Assets	—174.5	—36.4	—15.8	—20.1	—33.5	12.0	24.9	20.6	18.9
	(b) Special Deposit and Trust Accounts	— .2	.5	—	1.1	.3	1.0	—1.1	1.1	—
	(c) Recorded Receivables	—9.5	—6.3	— .7	11.4	3.3	35.3	60.2	71.6	3.7
	(d) Unclassified Transactions	— .2	1.3	1.4	— .5	—1.4	1.5	1.3	.2	9.6
	Total Debits	—66.3	87.2	94.3	—56.0	156.7	195.7	381.1	355.0	227.5

SUBSECTOR IV (a): FEDERAL ENTERPRISES

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	27.0	23.0	28.0	31.0	36.0	50.0	58.0	61.0	48.0
(b) Other Saving	22.0	34.0	—100.0	—111.0	166.0	—12.0	43.0	—24.0	8.0
C 3 Loans									
(a) Bank Loans	—1.8	— .5	— .7	19.3	—19.3	—	3.0	33.9	30.3
C 4 Claims on Associated Enterprises									
(c) Government	—105.7	—33.4	97.5	—2.0	—16.6	165.8	137.1	147.9	—192.3
C 6 Bonds									
(a) Government of Canada Bonds	—38.6	50.8	—46.4	28.3	28.7	—47.6	— .2	—	388.1
(b) Provincial Bonds	— .6	—	—	— .1	—1.9	—	—	—	—
(d) Other Bonds	—3.3	2.5	47.7	—6.6	7.5	4.2	—9.7	—15.2	—9.5
C 8 Insurance and Pensions	—	—	—	—	—	—	.2	.1	.1
D Other Transactions and Errors	34.7	10.8	68.2	—14.9	—43.7	35.3	149.7	151.3	—45.2
(b) Special Deposit and Trust Accounts	.2	— .1	.1	.4	— .5	.1	—	.5	— .3
(c) Recorded Payables	61.0	19.0	74.0	—12.0	—28.2	31.9	150.8	143.4	—56.9
(d) Unclassified Transactions	—5.1	— .7	—1.0	5.4	—4.3	3.6	—1.0	—2.5	8.9
(e) Residual	—21.4	—7.4	—4.9	—8.7	—10.7	— .3	— .1	9.9	3.1
Total Credits	—66.3	87.2	94.3	—56.0	156.7	195.7	381.1	355.0	227.5

SUBSECTOR IV (b): PROVINCIAL AND MUNICIPAL ENTERPRISES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 2	Change in Inventories	12.3	20.5	22.2	25.1	22.4	8.3	3.7	—1.7	—6.6
B 3	Gross Fixed Capital Formation									
	(b) Non-Residential	54.2	110.5	183.1	285.8	345.4	374.2	399.8	483.7	452.3
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	14.0	—4.2	1.7	21.4	—1.0	—2.4	—2.4	12.6	—11.0
C 3	Loans									
	(b) Other Loans	—	—	—	—	—	2.5	3.2	— .4	.6
C 4	Claims on Associated Enterprises									
	(c) Government	19.6	41.3	—1.1	50.0	—13.3	—15.1	25.9	—114.5	1.0
C 5	Mortgages	.1	— .1	.5	.3	.3	.8	.5	1.1	.1
C 6	Bonds									
	(a) Government of Canada Bonds	—5.6	4.1	7.6	—2.3	—12.5	—6.1	1.7	.7	5.8
	(b) Provincial Bonds	6.7	31.7	—22.2	—16.9	—16.2	—3.8	20.8	—34.2	21.6
	(c) Municipal Bonds	2.3	—2.0	— .8	3.5	—1.4	—2.7	—9.4	10.7	9.1
	(d) Other Bonds	— .2	—1.3	— .3	—	—	—	—	1.0	1.8
C 7	Stocks	—	3.1	— .2	—1.1	—1.2	— .3	.6	—	—
D	Other Transactions and Errors	4.6	44.5	25.6	26.3	19.2	9.9	4.9	14.2	8.6
	(a) Transfers of Existing Real Assets	—	39.8	26.8	—	31.9	—	—	—	—
	(b) Special Deposit and Trust Accounts	2.4	—2.6	—	1.1	—1.6	—1.9	1.9	2.6	3.4
	(c) Recorded Receivables	2.2	7.1	—1.2	24.7	—11.5	11.8	3.0	11.6	4.9
	(d) Unclassified Transactions	—	.2	—	.5	.4	—	—	—	.3
	Total Debits	108.0	248.1	216.1	392.1	341.7	365.3	449.3	373.2	483.3

SUBSECTOR IV (b): PROVINCIAL AND MUNICIPAL ENTERPRISES

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	48.0	47.0	48.0	60.0	66.0	71.0	73.0	87.0	102.0
C 3 Loans									
(a) Bank Loans	2.6	1.4	5.7	7.2	1.8	15.9	—22.6	—2.1	1.8
(b) Other Loans	—	—	—	—	1.1	—1.1	—	—	—
C 4 Claims on Associated Enterprises									
(c) Government	67.0	119.3	95.2	147.8	105.2	256.7	218.5	172.9	182.4
C 5 Mortgages	—	—	—	—	—	—	.6	—	— .6
C 6 Bonds									
(b) Provincial Bonds	18.5	156.5	112.4	166.8	105.0	20.6	205.6	107.2	187.7
(c) Municipal Bonds	— .1	—	— .6	—	—	— .2	—	—	—
(d) Other Bonds	19.0	—105.4	.2	—19.2	—	—6.9	—1.7	— .5	— .8
C 8 Insurance and Pensions	.5	— .3	.8	—1.8	— .2	.3	1.5	—1.8	.1
D Other Transactions and Errors	—9.5	29.6	—45.6	31.3	62.8	9.0	—25.6	10.5	10.7
(b) Special Deposit and Trust Accounts	.9	—1.3	.4	.5	.3	— .2	—3.9	1.6	3.1
(c) Recorded Payables	3.4	7.8	6.6	12.1	— .1	8.7	11.2	11.3	—3.6
(d) Unclassified Transactions	.4	—	.2	.1	—1.5	.1	.2	.5	.6
(e) Residual	—14.2	23.1	52.8	18.6	64.1	.4	—33.1	—2.9	10.6
Total Credits	108.0	248.1	216.1	392.1	341.7	365.3	449.3	373.2	483.3

SECTOR IV (c): OPERATION OF GOVERNMENT BUILDINGS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	25.0	27.0	36.0	39.0	43.0	48.0	53.0	57.0	61.0
C 4 Claims on Associated Enterprises									
(c) Government	—25.0	—27.0	—36.0	—39.0	—43.0	48.0	53.0	—57.0	—61.0
Total Credits	—	—	—	—	—	—	—	—	—

SECTOR V: BANKING

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 3	Gross Fixed Capital Formation									
	(b) Non-Residential	6.0	8.0	11.0	13.0	19.0	25.0	14.0	15.0	20.0
C 1	Currency and Deposits									
	(a) Gold	204.4	—249.4	114.7	89.2	101.3	273.7	42.9	99.5	84.2
	(b) Currency and Bank Deposits	—117.2	—18.7	—9.0	91.7	247.7	98.2	—120.9	—47.7	—104.9
C 3	Loans									
	(a) Bank Loans	103.0	476.0	193.0	94.8	500.0	229.0	349.0	627.3	60.3
C 4	Claims on Associated Enterprises									
	(b) Corporate	8.9	15.6	—3.7	—11.3	31.6	54.9	58.1	78.6	67.6
	(c) Government	5.0	10.0	—	—	—	2.8	3.0	5.5	— .7
C 5	Mortgages	— .4	— .4	— .3	— .2	— .2	— .1	—	—	74.0
C 6	Bonds									
	(a) Government of Canada Bonds	95.1	—569.2	445.0	140.7	—102.4	—68.2	67.7	4.3	456.2
	(b) Provincial Bonds	6.5	154.0	—40.0	—	—23.0	—65.0	—16.0	—22.0	—14.0
	(c) Municipal Bonds	24.0	18.0	7.0	21.0	33.0	—27.0	—8.0	—7.0	25.0
	(d) Other Bonds	—100.1	—37.2	518.9	—28.5	552.3	—245.4	69.7	—171.9	41.0
D	Other Transactions and Errors	4.9	—6.4	3.7	—7.5	17.6	—7.8	17.0	1.1	5.4
	(a) Transfers of Existing Real Assets	—1.9	1.2	— .2	2.9	9.3	—4.4	—1.7	—22.8	—6.6
	(b) Special Deposit and Trust Accounts	— .4	— .2	— .2	— .1	— .8	—	—	—	—
	(c) Recorded Receivables	6.3	—9.6	2.3	—7.3	1.8	5.0	19.4	25.0	11.2
	(d) Unclassified Transactions	.9	2.2	1.8	—3.0	7.3	—8.4	— .7	—1.1	.8
	Total Debits	240.1	—629.7	1,240.3	402.9	1,376.9	270.1	476.5	582.7	714.1

SECTOR V: BANKING

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)										
B 1	Gross Saving									
	(a) Capital Consumption Allowances, etc.	3.5	3.6	3.7	4.9	7.0	7.8	7.3	7.4	9.3
	(b) Other Saving	26.6	24.7	22.3	28.9	29.4	32.5	33.0	52.3	24.9
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	225.4	121.7	709.1	271.7	843.9	21.6	341.9	538.5	487.5
C 4	Claims on Associated Enterprises									
	(c) Government	—26.5	—761.4	518.1	126.1	515.9	221.8	103.0	—39.4	119.4
C 7	Stocks	—	—	—	—	—	8.5	.9	10.9	42.5
D	Other Transactions and Errors	11.1	—18.3	—12.9	—28.7	—19.3	—22.1	—9.6	13.0	30.5
	(c) Recorded Payables	4.7	.9	2.6	—3.7	— .1	4.0	.4	9.8	32.3
	(d) Unclassified Transactions	—1.7	1.6	.7	— .7	— .7	3.3	10.5	.5	—4.5
	(e) Residual	8.1	—20.8	—16.2	—24.3	—18.5	—29.4	—20.5	2.7	2.7
	Total Credits	240.1	—629.7	1,240.3	402.9	1,376.9	270.1	476.5	582.7	714.1

SUBSECTOR V (a): BANK OF CANADA

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
B 3 Gross Fixed Capital Formation									
(b) Non-Residential	.7	—	.3	1.8	1.7	.3	.3	.1	.4
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	—155.9	1.0	—1.7	69.8	46.5	11.9	—38.0	—22.5	— .3
C 4 Claims on Associated Enterprises									
(c) Government	5.0	10.0	—	—	—	2.8	3.0	5.5	— .7
C 6 Bonds									
(a) Government of Canada Bonds	61.5	—22.1	133.3	—3.6	—60.9	256.3	43.7	46.3	—55.8
(b) Provincial Bonds	—1.5	—2.0	—	—	—	—	—	—	—
(d) Other Bonds	—	—	—	5.0	247.8	—157.4	—77.9	4.9	.3
D Other Transactions and Errors	7.0	—8.3	1.7	—9.5	10.2	—3.0	18.2	24.6	13.4
(c) Recorded Receivables	7.3	—9.3	.6	—7.8	1.1	4.7	19.6	24.6	12.7
(d) Unclassified Transactions	— .3	1.0	1.1	—1.7	9.1	—7.7	—1.4	—	.7
Total Debits	—83.2	—21.4	133.6	63.5	245.3	110.9	—50.7	58.9	—42.7

SUBSECTOR V (a): BANK OF CANADA

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	.1	.1	.1	.7	.3	.3	.3	.3	.3
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	—83.3	—21.1	130.1	66.0	245.5	101.8	—64.1	35.6	—64.4
C 4 Claims on Associated Enterprises									
(c) Government	—1.5	—2.2	.3	1.3	— .8	4.4	4.8	15.1	7.8
D Other Transactions and Errors	1.5	1.8	3.1	—4.5	.3	4.4	8.3	7.9	13.6
(c) Recorded Payables	3.9	— .2	2.4	—3.8	.5	1.1	—2.3	7.4	18.1
(d) Unclassified Transactions	—2.4	2.0	.7	— .7	— .2	3.3	10.6	.5	—4.5
Total Credits	—83.2	—21.4	133.6	63.5	245.3	110.9	—50.7	58.9	—42.7

SUBSECTOR V (b): EXCHANGE FUND

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
C 1 Currency and Deposits									
(a) Gold	204.4	—249.4	114.7	89.2	101.3	273.7	42.9	99.5	84.2
(b) Currency and Bank Deposits	—19.2	1.4	—18.2	9.3	123.2	9.9	—99.2	—28.6	—14.8
C 6 Bonds									
(a) Government of Canada Bonds	—5.4	1.9	—.3	—8.7	—9.5	—.5	—	—	—
(d) Other Bonds	—203.1	—513.2	419.9	34.5	300.5	—66.0	154.6	—125.8	43.7
D Other Transactions and Errors									
(c) Recorded Receivables	—1.0	—.3	1.7	.5	.7	.3	—.2	.4	—1.5
Total Debits	—24.3	—759.6	517.8	124.8	516.2	217.4	98.1	—54.5	111.6
Credits (Liability Items)									
C 4 Claims on Associated Enterprises									
(c) Government	—25.0	—759.2	517.8	124.8	516.7	217.4	98.2	—54.5	111.6
D Other Transactions and Errors									
(d) Unclassified Transactions	.7	—.4	—	—	—.5	—	— .1	—	—
Total Credits	—24.3	—759.6	517.8	124.8	516.2	217.4	98.1	—54.5	111.6

SUBSECTOR V (c): CHARTERED BANKS

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 3	Gross Fixed Capital Formation									
	(b) Non-Residential	3.4	9.2	10.5	14.1	26.6	20.3	12.0	—7.9	13.0
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	57.9	—21.1	10.9	12.6	78.0	76.4	16.3	3.4	—89.8
C 3	Loans									
	(a) Bank Loans	103.0	476.0	193.0	94.8	500.0	229.0	349.0	627.3	60.3
C 4	Claims on Associated Enterprises									
	(b) Corporate	8.9	15.6	—3.7	—11.3	31.6	54.9	58.1	78.6	67.6
C 5	Mortgages	— .4	— .4	— .3	— .2	— .2	— .1	—	—	74.0
C 6	Bonds									
	(a) Government of Canada Bonds	39.0	—649.0	312.0	153.0	—32.0	—324.0	24.0	—42.0	512.0
	(b) Provincial Bonds	8.0	156.0	—40.0	—	—23.0	—65.0	—16.0	—22.0	—14.0
	(c) Municipal Bonds	24.0	18.0	7.0	21.0	33.0	—27.0	—8.0	—7.0	25.0
	(d) Other Bonds	103.0	146.0	99.0	—68.0	4.0	—22.0	—7.0	—51.0	—3.0
D	Other Transactions and Errors	.8	1.0	.5	—1.4	—2.6	— .7	.7	—1.1	.1
	(b) Special Deposit and Trust Accounts	— .4	— .2	— .2	— .1	— .8	—	—	—	—
	(d) Unclassified Transactions	1.2	1.2	.7	—1.3	—1.8	— .7	.7	—1.1	.1
	Total Debits	347.6	151.3	588.9	214.6	615.4	—58.2	429.1	578.3	645.2

SUBSECTOR V (c): CHARTERED BANKS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	3.4	3.5	3.6	4.2	6.7	7.5	7.0	7.1	9.0
(b) Other Saving	26.6	24.7	22.3	28.9	29.4	32.5	33.0	52.3	24.9
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	308.7	142.8	579.0	205.7	598.4	—80.2	406.0	502.9	551.9
C 7 Stocks	—	—	—	—	—	8.5	.9	10.9	42.5
D Other Transactions and Errors	8.9	—19.7	—16.0	—24.2	—19.1	—26.5	—17.8	5.1	16.9
(c) Recorded Payables	.8	1.1	.2	.1	— .6	2.9	2.7	2.4	14.2
(e) Residual	8.1	—20.8	—16.2	—24.3	—18.5	—29.4	—20.5	2.7	2.7
Total Credits	347.6	151.3	588.9	214.6	615.4	—58.2	429.1	578.3	645.2

SECTOR VI: LIFE INSURANCE

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 3	Gross Fixed Capital Formation									
	(b) Non-Residential	.3	.4	.9	2.2	3.9	5.1	4.2	6.5	11.7
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	10.7	3.2	—8.5	5.9	6.1	—6.9	6.1	—10.3	—7.4
C 3	Loans									
	(b) Other Loans	—2.5	2.9	5.7	8.9	12.4	21.3	14.8	12.7	15.4
C 4	Claims on Associated Enterprises									
	(b) Corporate	3.9	34.8	—20.5	—45.4	—12.4	—39.6	—47.0	—48.9	—31.2
C 5	Mortgages	28.7	68.3	118.5	115.1	166.6	205.3	147.3	193.9	236.9
C 6	Bonds									
	(a) Government of Canada Bonds	142.3	—20.4	—172.1	—181.0	—226.3	—139.7	—83.3	—58.6	—194.1
	(b) Provincial Bonds	—18.8	39.4	22.6	80.0	14.3	—18.5	48.9	9.3	33.7
	(c) Municipal Bonds	—25.6	—25.1	35.1	40.2	63.0	43.9	26.5	16.9	36.7
	(d) Other Bonds	35.2	115.7	213.4	189.8	182.0	171.8	124.8	155.6	190.0
C 7	Stocks	.4	4.5	12.7	3.1	2.1	—6.7	10.6	10.3	12.5
D	Other Transactions and Errors	1.2	7.0	8.5	15.9	44.6	2.0	25.8	23.4	27.4
	(a) Transfers of Existing Real Assets	—3.1	.6	1.5	8.3	10.3	18.2	17.3	9.0	20.6
	(c) Recorded Receivables	4.3	6.4	7.0	7.6	34.3	—16.2	8.5	14.4	6.8
	Total Debits	175.8	230.7	216.3	234.7	256.3	238.0	278.7	310.8	331.6

SECTOR VI: LIFE INSURANCE

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	1.3	1.1	1.5	1.5	1.7	2.6	2.4	3.3	2.6
(b) Other Saving	.3	— .6	.1	.3	.9	— .3	.2	.7	.9
C 3 Loans									
(a) Bank Loans	—12.0	—	—	— .1	—	.2	2.1	4.3	—1.2
C 7 Stocks	.1	.4	.1	.2	.5	.8	.1	.1	—
C 8 Insurance and Pensions	189.7	227.8	211.6	230.8	251.6	234.8	271.1	301.6	326.8
D Other Transactions and Errors	—3.6	2.0	3.0	2.0	1.6	— .1	2.8	.8	2.5
(c) Recorded Payables	—4.3	2.2	2.4	.6	2.6	.6	3.8	2.8	.1
(e) Residual	.7	— .2	.6	1.4	—1.0	— .7	—1.0	—2.0	2.4
Total Credits	175.8	230.7	216.3	234.7	256.3	238.0	278.7	310.8	331.6

SUBSECTOR VI (a): CANADIAN FEDERAL LIFE INSURANCE COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 3	New Fixed Capital									
	(b) Non-Residential	.3	.4	.8	2.0	3.4	4.8	3.9	6.1	11.1
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	3.5	7.1	—4.6	—2.3	5.6	—2.1	3.6	—8.1	.7
C 3	Loans									
	(b) Other Loans	—1.4	2.2	4.7	6.7	9.6	16.1	11.2	9.4	11.2
C 4	Claims on Associated Enterprises									
	(b) Corporate	15.5	30.0	—4.4	—38.8	—7.5	—11.2	—22.8	—21.8	—24.7
C 5	Mortgages	28.1	67.4	112.3	107.3	130.7	137.1	105.8	150.5	209.7
C 6	Bonds									
	(a) Government of Canada Bonds	82.8	—19.1	—130.8	—120.8	—79.4	—95.9	—51.2	—45.8	—126.3
	(b) Provincial Bonds	—11.0	19.2	31.8	62.6	1.8	—24.9	27.3	2.0	19.9
	(c) Municipal Bonds	—14.4	—3.6	32.5	32.6	35.6	39.7	27.7	14.2	19.6
	(d) Other Bonds	20.3	58.1	101.4	102.5	45.4	112.1	59.9	90.7	88.6
C 7	Stocks	—1.5	— .1	3.5	.7	2.4	—5.5	8.3	5.2	9.6
D	Other Transactions and Errors	— .2	4.3	6.4	13.7	41.7	—2.2	22.8	18.2	23.7
	(a) Transfers of Existing Real Assets	—3.3	— .3	.7	7.9	10.0	17.4	16.4	8.2	19.1
	(c) Recorded Receivables	3.1	4.6	5.7	5.8	31.7	—19.6	6.4	10.0	4.6
	Total Debits	122.0	165.9	153.6	166.2	189.3	168.0	196.5	220.6	243.1
Credits (Liability Items)										
B 1	Gross Saving									
	(a) Depreciation and Similar Charges	1.2	1.0	1.3	1.4	1.6	2.4	2.3	3.1	2.6
	(b) Other Saving	.3	— .6	.1	.3	.8	— .4	.1	.6	.8
C 3	Loans									
	(a) Bank Loans	—12.0	—	—	— .1	—	.2	2.1	4.3	—1.2
C 7	Stocks	.1	.4	.1	.2	.5	.8	.1	.1	.0
C 8	Insurance and Pensions	134.9	163.7	149.3	162.1	185.3	165.2	190.2	212.4	233.0
D	Other Transactions and Errors	—2.5	1.4	2.8	2.3	1.1	— .2	1.7	.1	7.9
	(c) Recorded Payables	—3.2	1.6	2.2	.9	2.1	.5	2.7	2.1	5.5
	(e) Residual	.7	— .2	— .6	1.4	—1.0	— .7	—1.0	—2.0	2.4
	Total Credits	122.0	165.9	153.6	166.2	189.3	168.0	196.5	220.6	243.1

SUPPLEMENTARY TABLE

CANADIAN FEDERAL LIFE INSURANCE COMPANIES
ALL TRANSACTIONS, INCL. TRANSACTIONS OUT OF CANADA

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 3	New Fixed Capital									
	(b) Non-Residential	.3	.4	1.1	2.0	3.4	5.3	4.0	6.1	11.4
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	—1.8	21.0	—6.2	—7.2	—1.9	19.8	—4.2	—4.0	—8.3
C 3	Loans									
	(b) Other Loans	1.1	6.0	9.0	12.6	15.9	23.9	19.7	17.9	19.7
C 5	Mortgages	29.8	85.9	143.5	137.7	145.7	159.3	134.0	179.1	264.2
C 6	Bonds									
	(a) Government of Canada	82.8	—19.1	—136.8	—126.5	—77.3	—97.0	—51.3	—45.9	—127.8
	(b) Provincial	—11.0	19.2	33.4	59.0	2.0	—19.5	24.4	7.7	25.2
	(c) Municipal	—14.9	—3.5	32.8	30.8	33.9	41.1	28.9	13.7	22.7
	(d) Other Bonds	123.5	135.3	156.0	123.5	111.4	133.2	142.5	163.5	129.4
C 7	Stocks	1.6	2.8	12.1	20.5	20.3	—1.2	—1.1	3.6	23.8
D	Other Transactions and Errors	1.1	7.6	10.6	12.7	19.1	27.4	28.4	23.4	25.7
	(a) Transfers of Existing Real Assets	—3.3	— .4	1.0	8.0	9.9	19.2	16.6	8.1	19.5
	(c) Recorded Receivables	4.4	8.0	9.6	4.7	9.2	8.2	11.8	15.3	6.2
	Total Debits	212.5	255.6	255.5	265.1	272.5	292.3	325.3	365.1	386.0
Credits (Liability Items)										
B 1	Gross Saving									
	(a) Depreciation and Similar Charges	1.3	1.1	1.4	1.4	1.6	2.5	2.3	3.2	2.6
	(c) Other Saving	.3	— .7	.1	.4	.8	— .4	.2	.6	.9
C 3	Loans									
	(a) Bank Loans	—41.0	— .1	.6	— .1	— .3	.2	2.1	5.3	— .6
C 7	Stocks	.1	.4	.1	.2	.1	.8	.1	.1	.0
C 8	Insurance and Pensions	256.8	254.3	252.2	263.5	270.7	287.8	319.8	355.3	374.8
D	Other Transactions and Errors	—5.0	.6	1.1	— .3	— .4	1.4	.8	.6	8.3
	(c) Recorded Payables	—2.9	.9	.3	1.9	1.2	3.0	2.4	3.8	4.7
	(e) Residual	—2.1	— .3	.8	—2.2	—1.6	—1.6	—1.6	—3.2	3.6
	Total Credits	212.5	255.6	255.5	265.1	272.5	292.3	325.3	365.1	386.0

SUBSECTOR VI (b): PROVINCIAL LIFE INSURANCE COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 3	New Fixed Capital									
	(b) Non-Residential	— .1	—	—	.1	.1	.2	.2	.3	.3
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	—	.7	— .2	— .2	.1	.8	— .2	— .2	— .2
C 3	Loans									
	(b) Other Loans	—	.2	.3	.4	.6	.9	.8	.8	.5
C 5	Mortgages	.9	3.1	4.5	4.6	5.1	6.2	5.1	8.1	6.9
C 6	Bonds									
	(a) Government of Canada Bonds	6.1	—1.5	—10.1	—4.6	—58.4	—7.1	—4.5	—4.9	—91.2
	(b) Provincial Bonds	— .8	1.5	2.4	2.4	1.3	—1.8	2.4	.2	14.4
	(c) Municipal Bonds	—1.1	— .3	2.5	1.2	26.2	2.9	2.4	1.5	14.2
	(d) Other Bonds	1.5	4.4	7.9	3.9	33.4	8.3	5.3	9.5	63.9
C 7	Stocks	—	.1	.4	.7	.7	—	—	.2	.7
D	Other Transactions and Errors	.1	.3	.3	.4	.6	1.0	1.0	1.1	.6
	(a) Transfers of Existing Real Assets	—	—	—	.3	.3	.7	.6	.4	.5
	(c) Recorded Receivables	.1	.3	.3	.1	.3	.3	.4	.7	.1
	Total Debits	6.6	8.5	8.0	8.9	9.7	11.4	12.5	16.6	10.1
Credits (Liability Items)										
B 1	Gross Saving									
	(b) Other Saving	—	—	—	—	.1	.1	.1	.1	.1
C 8	Insurance and Pensions	8.0	7.8	8.1	8.9	9.6	11.6	12.3	16.0	9.8
D	Other Transactions and Errors									
	(c) Recorded Payables	—1.4	.7	— .1	—	—	— .3	.1	.5	.2
	Total Credits	6.6	8.5	8.0	8.9	9.7	11.4	12.5	16.6	10.1

SUBSECTOR VI (c): BRITISH AND FOREIGN LIFE INSURANCE COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 3	New Fixed Capital									
	(b) Non-Residential	.1	— .0	.1	.1	.4	.1	.1	.1	.3
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	7.2	—4.6	—3.7	8.4	.4	—5.6	2.7	—2.0	—7.9
C 3	Loans									
	(b) Other Loans	—1.1	.5	.7	1.8	2.2	4.3	2.8	2.5	3.7
C 4	Claims on Associated Enterprises									
	(b) Corporate	—11.6	4.8	—16.1	—6.6	—4.9	—28.4	—24.2	—27.1	—6.5
C 5	Mortgages	— .3	—2.2	1.7	3.2	30.8	62.0	36.4	35.3	20.3
C 6	Bonds									
	(a) Government of Canada Bonds	53.4	.2	—31.2	—55.6	—88.5	—36.7	—27.6	—7.9	23.4
	(b) Provincial Bonds	—7.0	18.7	—11.6	15.0	11.2	8.2	19.2	7.1	— .6
	(c) Municipal Bonds	—10.1	—21.2	.1	6.4	1.2	1.3	—3.6	1.2	2.9
	(d) Other Bonds	13.4	53.2	104.1	83.4	103.2	51.4	59.6	55.4	37.5
C 7	Stocks	1.9	4.5	8.8	1.7	—1.0	—1.2	2.3	4.9	2.2
D	Other Transactions and Errors	1.3	2.4	1.8	1.8	2.3	3.2	2.0	4.1	3.1
	(a) Transfers of Existing Real Assets	.2	.9	.8	.1	— .0	.1	.3	.4	1.0
	(c) Recorded Receivables	1.1	1.5	1.0	1.7	2.3	3.1	1.7	3.7	2.1
	Total Debits	47.2	56.3	54.7	59.6	57.3	58.6	69.7	73.6	78.4
Credits (Liability Items)										
B 1	Gross Saving									
	(a) Depreciation and Similar Charges	.1	.1	.2	.1	.1	.2	.1	.2	— .0
C 8	Insurance and Pensions	46.8	56.3	54.2	59.8	56.7	58.0	68.6	73.2	84.0
D	Other Transactions and Errors									
	(c) Recorded Payables	.3	— .1	.3	— .3	.5	.4	1.0	.2	—5.6
	Total Credits	47.2	56.3	54.7	59.6	57.3	58.6	69.7	73.6	78.4

SECTOR VII: OTHER FINANCIAL INSTITUTIONS

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 2	Change in Inventories	—	—	1.5	— .1	—1.1	— .1	—	—	—
B 3	Gross Fixed Capital Formation									
	(a) Residential	15.0	2.0	41.0	43.0	17.0	6.0	14.0	17.0	8.0
	(b) Non-Residential	1.2	1.7	3.5	4.1	3.7	7.7	11.2	15.4	13.7
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	21.1	32.0	6.8	5.6	13.5	51.0	19.3	—6.9	39.6
	(c) Other Institutional Deposits	.8	.3	— 1.4	.7	1.4	— 1.9	2.3	1.7	— 1.2
C 2	Charge and Instalment Credit									
	(b) Instalment Credit	29.0	63.6	23.5	54.0	109.0	20.1	226.7	160.8	—44.8
C 3	Loans									
	(b) Other Loans	22.9	20.5	22.3	24.3	27.3	33.8	53.6	70.1	71.6
C 4	Claims on Associated Enterprises									
	(b) Corporate	—3.4	2.4	—6.9	—13.0	—1.4	—2.7	3.4	—9.6	— .2
C 5	Mortgages	57.2	85.9	64.5	109.9	163.4	184.8	128.6	171.6	166.3
C 6	Bonds									
	(a) Government of Canada Bonds	52.3	32.7	3.8	—5.4	—12.4	—1.8	21.3	44.0	43.7
	(b) Provincial Bonds	15.3	30.1	.6	—27.4	6.6	11.8	24.1	33.3	44.4
	(c) Municipal Bonds	14.4	33.9	30.1	44.3	34.6	19.6	28.3	11.9	45.9
	(d) Other Bonds	9.8	33.3	32.9	54.8	23.4	18.8	26.0	19.7	67.3
C 7	Stocks	24.9	—1.6	20.1	22.0	22.1	11.7	26.3	28.1	55.5
D	Other Transactions and Errors	32.4	16.6	14.8	27.2	73.5	29.3	—4.1	15.7	—10.5
	(a) Transfers of Existing Real Assets	—6.0	5.3	4.2	6.9	16.2	48.9	19.9	17.3	1.6
	(b) Special Deposit and Trust Accounts	17.7	1.8	1.3	3.9	1.2	1.3	5.6	3.7	10.1
	(c) Recorded Receivables	19.8	20.8	6.8	26.0	76.1	10.3	3.4	29.6	16.6
	(d) Unclassified Transactions	.9	— .7	2.5	4.2	14.8	8.0	6.8	— .3	—5.6
	Total Debits	292.9	285.6	247.1	344.0	480.6	329.5	581.0	572.8	499.3

SECTOR VII: OTHER FINANCIAL INSTITUTIONS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	1.2	1.2	3.4	4.8	5.5	5.1	5.5	4.8	5.0
(b) Other Saving	10.8	12.5	4.4	26.2	18.9	18.9	22.6	19.3	48.5
C 1 Currency and Deposits									
(c) Other Institutional Deposits	143.0	91.2	95.6	97.1	89.9	85.4	132.2	105.5	304.7
C 3 Loans									
(a) Bank Loans	27.5	31.4	—1.0	14.8	43.1	—46.0	137.1	27.2	—52.3
(b) Other Loans	—1.8	.2	2.0	.5	—2.5	.9	— .6	— .1	.6
C 4 Claims on Associated Enterprises									
(b) Corporate	15.4	15.7	8.3	12.5	17.9	28.6	26.8	33.1	15.3
(c) Government	45.1	33.7	52.9	96.2	125.9	51.1	71.7	107.5	82.6
C 5 Bonds									
(d) Other Bonds	8.6	37.1	18.1	33.4	81.2	110.1	38.8	125.0	—13.8
C 7 Stocks	4.2	11.1	7.8	17.8	29.6	19.2	34.5	38.0	47.5
C 8 Insurance and Pensions	10.9	11.6	8.6	11.1	8.8	15.5	17.1	15.2	27.1
D Other Transactions and Errors	28.0	39.9	47.0	29.6	62.3	40.7	95.3	97.3	34.1
(b) Special Deposit and Trust Accounts	2.0	4.9	7.3	7.2	13.0	—1.9	28.0	19.8	— .9
(c) Recorded Payables	25.6	34.8	35.4	33.3	49.7	54.8	69.9	68.8	51.4
(d) Unclassified Transactions	— .4	— .3	9.1	—9.2	4.7	—2.8	2.5	14.1	—14.7
(e) Residual	.8	— .5	—4.8	—1.7	—3.1	—9.4	—5.1	—5.4	—1.7
Total Credits	292.9	285.6	217.1	344.0	480.6	329.5	581.0	572.8	499.3

SUBSECTOR VII (a): QUEBEC SAVINGS BANKS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
B 3 Gross Fixed Capital Formation									
(b) Non-Residential	—	.1	.3	.3	.1	.4	.3	.4	.8
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	1.5	2.2	— .8	3.2	— .1	3.5	— .8	.3	3.6
C 3 Loans									
(b) Other Loans	— .9	.3	— .3	.1	.2	.4	1.3	1.4	— .1
C 5 Mortgages	—	—	—	.1	.3	1.2	2.7	2.3	6.0
C 6 Bonds									
(a) Government of Canada Bonds	9.6	8.4	10.1	1.1	—3.5	—3.4	5.9	—3.9	—26.9
(b) Provincial Bonds	5.5	5.4	.8	4.7	5.1	—2.9	— .5	.9	18.9
(c) Municipal Bonds	1.9	—3.8	.5	3.1	2.7	2.7	5.2	4.3	9.6
(d) Other Bonds	—1.2	1.0	1.5	.6	.9	— .2	—1.2	2.4	5.1
D Other Transactions and Errors									
(d) Unclassified Transactions	—	—	— .3	—	—	—	—	— .1	—
Total Debits	16.4	13.6	11.8	13.2	5.7	1.7	12.9	8.0	17.0

SUBSECTOR VII (a): QUEBEC SAVINGS BANKS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	.1	.1	.1	.1	.1	.1	.1	.2	.2
(b) Other Saving	.6	—	— .4	.2	.2	.2	.3	.2	.8
C 1 Currency and Deposits									
(c) Other Institutional Deposits	16.4	14.5	11.2	14.0	4.4	2.8	11.7	6.9	15.6
C 3 Loans									
(a) Bank Loans	.1	— .7	1.4	—1.0	.9	—1.4	1.0	.6	.5
D Other Transactions and Errors	— .8	— .3	— .5	— .1	.1	—	— .2	.1	— .1
(d) Unclassified Transactions	— .7	— .2	— .2	—	.1	—	—	.1	—
(e) Residual	— .1	— .1	— .3	— .1	—	—	— .2	—	— .1
Total Credits	16.4	13.6	11.8	13.2	5.7	1.7	12.9	8.0	17.0

SUBSECTOR VII (b): CREDIT UNIONS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
B 3 Gross Fixed Capital Formation									
(b) Non-Residential	.2	.9	.8	1.0	1.4	—	2.0	1.5	2.3
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	7.5	1.6	6.3	—2.1	1.6	14.9	4.9	—5.1	19.9
C 3 Loans									
(b) Other Loans	8.0	9.0	13.0	9.0	9.0	4.0	18.0	35.0	22.0
C 5 Mortgages	17.0	16.0	8.0	12.0	11.0	15.0	18.0	24.0	15.0
C 6 Bonds									
(a) Government of Canada Bonds	3.5	1.2	3.2	3.0	— .1	3.3	7.8	5.5	4.4
(b) Provincial Bonds	2.6	.9	2.4	2.3	— .1	2.5	5.8	4.1	3.4
(c) Municipal Bonds	1.3	.4	1.2	1.1	—	1.2	3.0	2.0	1.7
(d) Other Bonds	1.3	.4	1.2	1.1	—	1.2	3.0	2.0	1.7
D Other Transactions and Errors									
(d) Unclassified Transactions	—	— .3	1.5	.6	5.5	5.6	3.5	—4.3	—6.9
Total Debits	41.4	30.1	37.6	28.0	28.3	47.7	66.0	64.7	63.5

SUBSECTOR VII (b): CREDIT UNIONS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	.1	.1	.1	.1	.2	.2	.2	.3	.4
(b) Other Saving	1.5	1.6	—5.9	11.5	.9	2.7	2.3	—11.1	17.4
C 1 Currency and Deposits									
(c) Other Institutional Deposits	39.6	27.2	33.5	24.5	24.8	45.4	61.5	58.1	57.1
D Other Transactions and Errors	.2	1.2	9.9	—8.1	2.4	— .6	2.0	17.4	—11.4
(c) Recorded Payables	—	.5	1.1	.4	—1.1	1.1	.2	4.6	4.2
(d) Unclassified Transactions	—	.3	9.3	—9.3	4.3	—1.8	1.9	13.2	—15.6
(e) Residual	.2	.4	— .5	.8	— .8	.1	— .1	— .4	—
Total Credits	41.4	30.1	37.6	28.0	28.3	47.7	66.0	64.7	63.5

SUBSECTOR VII (c): GOVERNMENT SAVINGS INSTITUTIONS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
B 3 Gross Fixed Capital Formation									
(b) Non-Residential	.1	—	— .2	—	.1	—	—	.1	—
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	—1.2	2.7	— .4	.7	—2.3	— .2	5.8	—4.1	3.8
(c) Other Institutional Deposits	—	—	—	—	—	—	— .2	— .1	—
C 3 Loans									
(b) Other Loans	2.9	1.7	1.6	.2	3.1	5.2	— .2	2.9	— .4
C 6 Bonds									
(a) Government of Canada Bonds	—	—	1.2	1.4	—2.7	—1.9	.3	2.7	—4.2
(b) Provincial Bonds	—	—	—	1.5	1.9	—	1.1	1.2	4.0
(c) Municipal Bonds	—	—	—	.4	—	—	—	—	—
(d) Other Bonds	—	—	—	— .4	—	—	—	— .1	— .2
D Other Transactions and Errors	16.9	2.1	2.4	1.4	—1.5	—	5.7	4.0	10.1
(b) Special Deposit and Trust Accounts	17.7	1.8	1.3	3.9	—1.2	— .3	5.9	3.8	10.1
(c) Recorded Receivables	— .8	.3	1.2	—2.6	— .4	.3	— .1	.1	—
(d) Unclassified Transactions	—	—	— .1	.1	.1	—	— .1	.1	—
Total Debits	18.7	6.5	4.6	5.2	—1.4	3.1	12.5	6.6	13.1

SUBSECTOR VII (c): GOVERNMENT SAVINGS INSTITUTIONS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
C 1 Currency and Deposits									
(c) Other Institutional Deposits	18.5	6.5	4.7	5.1	—1.5	2.8	12.5	5.8	12.7
C 4 Claims on Associated Enterprises									
(c) Government	— .1	— .1	— .2	—	— .1	— .1	— .1	— .1	— .1
D Other Transactions and Errors	.3	.1	.1	.1	.2	.4	.1	.9	.3
(c) Recorded Payables	—	—	—	—	—	.4	— .1	.5	.1
(d) Unclassified Transactions	—	—	—	—	—	—	.1	—	—
(e) Residual	.3	.1	.1	.1	.2	—	.1	.4	.2
Total Credits	18.7	6.5	4.6	5.2	—1.4	3.1	12.5	6.6	13.1

SUBSECTOR VII (d): TRUST COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
B 3 Gross Fixed Capital Formation									
(b) Non-Residential	— .5	.1	1.8	.9	.6	—	.4	1.2	2.4
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	1.0	.1	2.4	— .3	5.3	—2.1	10.3	—6.8	7.4
(c) Other Institutional Deposits	.5	.5	—1.4	.4	—	.1	— .2	1.2	— .7
C 3 Loans									
(b) Other Loans	.5	—3.8	2.1	.5	.2	4.1	— .5	—1.9	13.8
C 5 Mortgages	7.4	5.8	10.4	10.3	14.6	14.9	7.7	12.4	25.7
C 6 Bonds									
(a) Government of Canada Bonds	18.5	8.1	2.9	7.5	7.2	—12.6	—8.8	—2.9	39.5
(b) Provincial Bonds	2.6	3.0	6.6	9.8	5.3	— .3	2.7	2.8	23.5
(c) Municipal Bonds	3.1	2.9	3.8	4.2	1.9	2.6	2.5	.3	10.0
(d) Other Bonds	3.3	5.1	2.8	.6	6.3	5.4	6.8	1.7	25.1
C 7 Stocks	3.7	— .5	1.9	— .8	— .3	2.0	.1	1.2	1.2
D Other Transactions and Errors	.6	.6	— .2	1.0	2.5	.5	.7	.2	2.2
(c) Recorded Receivables	.5	.2	.1	.3	.4	.1	.2	.1	1.4
(d) Unclassified Transactions	.1	.4	— .3	.7	2.1	.4	.5	.1	.8
Total Debits	40.7	21.9	33.1	34.1	43.6	14.6	21.7	9.4	150.1

SUBSECTOR VII (d): TRUST COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	.4	.4	.4	.5	.5	.5	.5	.5	.5
(b) Other Saving	1.1	1.2	.8	1.7	1.4	1.4	1.3	1.5	1.9
C 1 Currency and Deposits									
(c) Other Institutional Deposits	41.6	22.7	29.2	31.2	36.7	11.4	20.2	3.8	146.9
C 3 Loans									
(a) Bank Loans	—2.9	— .6	.8	— .5	.7	.4	— .7	2.2	—2.1
(b) Other Loans	—1.4	.2	.3	—	— .5	.2	— .1	— .1	.6
C 4 Claims on Associated Enterprises									
(b) Corporate	—	—	.1.	.1	—	— .1	— .1	—	—
C 7 Stocks	1.8	—1.2	1.6	.8	4.5	.5	— .1	1.0	.9
C 8 Insurance and Pensions	—	.1	.1	— .1	—	—	.2	.1	— .1
D Other Transactions and Errors	.1	— .9	— .2	.4	.3	.3	.5	.4	1.5
(c) Recorded Payables	.4	— .7	—	.4	.3	.2	.4	— .1	1.3
(d) Unclassified Transactions	— .3	— .2	— .3	.2	— .2	— .2	—	.4	.2
(e) Residual	—	—	.1	— .2	.2	.3	.1	.1	—
Total Credits	40.7	21.9	33.1	34.1	43.6	14.6	21.7	9.4	150.1

SUBSECTOR VII (e): MORTGAGE LOAN COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 3	Gross Fixed Capital Formation									
	(b) Non-Residential	—1.2	—	.6	.1	.7	2.1	1.4	1.2	.4
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	2.5	1.1	.7	—2.0	3.9	2.7	—4.4	— .6	1.5
	(c) Other Institutional Deposits	.2	.2	— .2	.5	1.1	—2.0	1.2	.6	— .7
C 3	Loans									
	(b) Other Loans	— .2	.2	.6	— .2	.2	.5	.2	.1	.3
C 5	Mortgages	14.1	20.7	28.2	30.2	30.3	26.1	25.2	34.0	42.1
C 6	Bonds									
	(a) Government of Canada Bonds	9.3	—2.2	—18.7	—10.1	—6.8	2.2	— .6	1.9	17.3
	(b) Provincial Bonds	.5	—2.0	1.6	1.1	—2.3	—1.9	.3	— .4	2.2
	(c) Municipal Bonds	— .7	— .3	.5	1.3	.8	— .2	1.8	—1.2	3.1
	(d) Other Bonds	1.2	1.3	— .1	— .5	—1.1	—1.8	2.9	1.0	5.2
C 7	Stocks	4.1	4.3	2.8	—1.0	—2.4	—8.7	1.0	— .6	4.3
D	Other Transactions and Errors	—	—2.4	1.6	3.1	6.4	.3	1.1	— .3	4.2
	(c) Recorded Receivables	— .1	— .3	— .1	.5	—	.5	—	—1.3	—
	(d) Unclassified Transactions	.1	—2.1	1.7	2.6	6.4	— .2	1.1	1.0	4.2
	Total Debits	29.8	20.9	17.6	22.5	30.8	19.3	30.1	35.7	79.9

SUBSECTOR VII (e): MORTGAGE LOAN COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	.5	.5	.5	.5	.5	.5	.6	.6	.6
(b) Other Saving	1.1	1.6	1.7	1.1	3.8	1.5	1.9	2.3	4.3
C 1 Currency and Deposits									
(c) Other Institutional Deposits	26.9	20.3	17.0	22.3	25.5	23.0	26.3	30.9	72.4
C 3 Loans									
(a) Bank Loans	—	— .1	.1	—	—	—	—	.2	.1
C 7 Stocks	.1	.3	.2	—1.9	.6	—5.4	.5	1.4	.7
C 8 Insurance and Pensions	—	—	—	.5	— .5	—	—	—	.1
D Other Transactions and Errors	1.2	—1.7	—1.9	—	.9	— .3	.8	.3	1.7
(b) Special Deposit and Trust Accounts	—	—	—	—	.1	.1	.1	.1	.1
(c) Recorded Payables	.8	—1.9	—2.3	.2	.4	.4	.3	.1	.9
(d) Unclassified Transactions	.6	— .2	.3	— .1	.5	— .8	.5	.4	.7
(e) Residual	— .2	.4	.1	— .1	— .1	—	— .1	— .3	—
Total Credits	29.8	20.9	17.6	22.5	30.8	19.3	30.1	35.7	79.9

SUBSECTOR VII (f): C.M.H.C. AND V.L.A. HOUSING

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 2	Change in Inventories	—	—	1.5	— .1	—1.1	— .1	—	—	—
B 3	Gross Fixed Capital Formation									
	(a) Residential	15.0	2.0	41.0	43.0	17.0	6.0	14.0	17.0	8.0
	(b) Non-Residential	—	.1	.1	.2	.5	1.6	1.0	1.2	1.0
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	.4	.6	.4	1.9	.9	.1	2.0	— .1	—2.9
C 3	Loans									
	(b) Other Loans	—	—	.8	.9	.8	.3	1.2	1.2	—1.6
C 5	Mortgages	18.9	27.6	3.9	43.2	93.4	122.3	68.0	87.2	63.3
C 6	Bonds									
	(a) Government of Canada Bonds	5.4	—5.6	—	—	—	—	—	—	3.1
D	Other Transactions and Errors	.4	—1.7	11.7	8.4	10.8	—94.7	—21.2	—16.0	—4.8
	(a) Transfers of Existing Real Assets	—	—	9.9	—5.8	—17.6	—56.4	—21.2	—15.3	—4.3
	(c) Recorded Receivables	.4	—1.7	1.8	14.1	28.3	—38.3	—	— .7	— .5
	(d) Unclassified Transactions	—	—	—	.1	.1	—	—	—	—
	Total Debits	40.1	23.0	59.4	97.5	122.3	35.5	65.0	90.5	66.1

SUBSECTOR VII (f): C.M.H.C. AND V.L.A. HOUSING

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(a) Capital Consumption Allowances, etc.	—	—	2.2	3.5	4.0	3.5	3.8	2.7	2.7
C 4 Claims on Associated Enterprises									
(c) Government	40.1	22.2	53.8	92.9	118.6	46.2	64.1	93.9	64.9
C 8 Insurance and Pensions	—	.1	—	—	—	.1	.1	—	— .2
D Other Transactions and Errors	—	.7	3.4	1.1	— .3	—14.3	—3.0	—6.1	—1.3
(b) Special Deposit and Trust Accounts	—	—	3.3	.9	1.6	—2.3	.7	— .8	— .5
(c) Recorded Payables	.2	.8	4.4	2.4	2.0	—2.8	2.7	— .3	.8
(e) Residual	— .2	— .1	—4.3	—2.2	—3.9	—9.2	—6.4	—5.0	—1.6
Total Credits	40.1	23.0	59.4	97.5	122.3	35.5	65.0	90.5	66.1

SUBSECTOR VII (g): OTHER GOVERNMENT LENDING INSTITUTIONS

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	.2	—	— .2	.2	.7	— .3	.6	.2	—
C 3	Loans									
	(b) Other Loans	—	—	.1	—	.4	.3	1.3	— .3	.8
C 5	Mortgages	— .4	2.3	3.5	5.1	6.2	5.6	8.7	11.0	11.4
C 6	Bonds									
	(a) Government of Canada Bonds	.2	3.8	—5.2	—1.7	—3.6	—2.3	.1	—	— .2
	(b) Provincial Bonds	—	—	—	—	—	—	— .5	1.2	2.5
C 7	Stocks	—	.2	1.0	—	2.9	—	—	.7	—1.2
D	Other Transactions and Errors	— .2	— .1	— .1	— .1	—	.8	— .7	1.4	.6
	(a) Transfers of Existing Real Assets	— .3	— .2	— .1	— .1	— .1	— .1	— .2	.3	— .1
	(b) Special Deposit and Trust Accounts	—	—	—	—	—	1.6	— .3	— .1	—
	(c) Recorded Receivables	—	—	—	—	.1	— .7	— .3	1.1	.9
	(d) Unclassified Transactions	.1	.1	—	—	—	—	.1	.1	— .2
	Total Debits	— .2	6.2	— .9	3.5	6.6	4.1	9.5	14.2	13.9

SUBSECTOR VII (g): OTHER GOVERNMENT LENDING INSTITUTIONS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
C 4 Claims on Associated Enterprises									
(c) Government	— .1	6.2	— .9	3.3	6.7	4.3	8.5	14.3	13.7
C 8 Insurance and Pensions	—	—	—	—	—	—	—	—	.1
D Other Transactions and Errors	— .1	—	—	.2	— .1	— .2	1.0	— .1	.1
(c) Recorded Payables	—	—	—	—	—	.1	.2	.5	—
(e) Residual	— .1	—	—	.2	— .1	— .3	.8	— .6	.1
Total Credits	— .2	6.2	— .9	3.5	6.6	4.1	9.5	14.2	13.9

SUBSECTOR VII (h): INSTALMENT FINANCE COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
B 3 Gross Fixed Capital Formation									
(b) Non-Residential	.1	.1	.2	.5	.3	.2	.6	1.2	— .2
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	.9	4.3	—1.9	2.6	.2	19.5	—5.3	10.2	3.0
C 2 Charge and Instalment Credit									
(b) Instalment Credit	29.0	63.6	23.5	54.0	106.6	18.3	225.4	159.9	—46.1
C 4 Claims on Associated Enterprises									
(b) Corporate	— .9	2.7	1.1	— .1	1.0	.9	5.8	2.4	6.9
D Other Transactions and Errors	14.7	15.0	— .4	9.3	36.0	40.7	—6.0	21.3	—22.8
(c) Recorded Receivables	14.4	14.8	— .5	8.9	35.8	39.6	—5.7	20.0	—23.3
(d) Unclassified Transactions	.3	.2	.1	.4	.2	1.1	— .3	1.3	.5
Total Debits	43.8	85.7	22.5	66.3	144.1	79.6	220.5	195.0	—59.2

SUBSECTOR VII (h): INSTALMENT FINANCE COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(b) Other Saving	2.9	4.3	3.0	3.9	4.1	4.3	6.2	5.0	4.6
C 3 Loans									
(a) Bank Loans	26.3	31.2	—3.0	15.6	40.9	—47.5	121.8	25.2	—56.4
C 4 Claims on Associated Enterprises									
(b) Corporate	5.3	.3	—1.9	.8	1.5	8.7	6.9	7.1	—
C 6 Bonds									
(d) Other Bonds	5.5	37.5	18.7	34.2	79.9	110.4	39.2	124.4	—16.2
C 7 Stocks	1.7	6.4	.7	4.5	4.3	.6	14.5	11.5	8.1
D Other Transactions and Errors	2.1	6.0	5.0	7.3	13.4	3.1	31.9	21.8	.7
(b) Special Deposit and Trust Accounts	2.0	4.9	4.0	6.3	11.3	.3	27.2	20.5	— .5
(c) Recorded Payables	.1	.9	.9	1.2	2.1	3.0	4.5	1.2	1.2
(e) Residual	—	.2	.1	— .2	—	— .2	.2	.1	—
Total Credits	43.8	85.7	22.5	66.3	144.1	79.6	220.5	195.0	—59.2

SUBSECTOR VII (i): SMALL LOAN COMPANIES AND LICENSED MONEY LENDERS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
B 3 Gross Fixed Capital Formation									
(b) Non-Residential	.1	— .1	.2	.3	.2	.5	.5	.2	.7
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	— .7	1.5	2.0	—1.6	— .2	.6	1.3	— .5	.1
C 2 Charge and Instalment Credit									
(b) Instalment Credit	—	—	—	—	2.4	1.8	1.3	.9	1.3
C 3 Loans									
(b) Other Loans	13.9	14.3	7.6	14.7	14.1	18.8	32.0	31.4	36.1
C 6 Bonds									
(a) Government of Canada Bonds	— .3	— .2	— .1	—	1.5	—1.4	—	—	—
D Other Transactions and Errors									
(d) Unclassified Transactions	.3	1.0	— .1	— .3	.4	1.1	2.0	1.5	—4.0
Total Debits	13.3	16.5	9.6	13.1	18.4	21.4	37.1	33.5	34.2

SUBSECTOR VII (i): SMALL LOAN COMPANIES AND LICENSED MONEY LENDERS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(b) Other Saving	.7	.3	.3	.8	1.0	1.2	1.0	5.7	4.3
C 3 Loans									
(a) Bank Loans	4.0	2.2	1.0	.7	.6	.8	16.4	—1.1	5.6
C 4 Claims on Associated Enterprises									
(b) Corporate	7.7	14.1	7.9	10.7	16.0	18.9	17.0	27.6	24.3
D Other Transactions and Errors	.9	— .1	.4	.9	.8	.5	2.7	1.3	—
(c) Recorded Payables	.9	—	.5	.9	.8	.5	2.7	1.3	.2
(e) Residual	—	— .1	— .1	—	—	—	—	—	— .2
Total Credits	13.3	16.5	9.6	13.1	18.4	21.4	37.1	33.5	34.2

SUBSECTOR VII (j): INVESTMENT COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	.1	7.8	—5.7	1.9	.2	8.1	—4.8	.2	4.0
C 6 Bonds									
(a) Government of Canada Bonds	.1	7.2	1.5	2.0	.5	.5	—1.1	1.1	7.6
C 7 Stocks	4.2	—10.8	10.8	10.6	19.2	16.7	22.0	16.2	26.6
D Other Transactions and Errors	—	1.2	— .5	.2	.4	—	—	.1	.7
(a) Transfers of Existing Real Assets	—	.3	—	—	—	.1	—	—	.1
(c) Recorded Receivables	—	.9	— .5	.2	.4	— .1	—	.1	.6
Total Debits	4.4	5.4	6.1	14.7	20.3	25.3	16.1	17.6	38.9

SUBSECTOR VII (j): INVESTMENT COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(b) Other Saving	.9	1.0	.6	.7	1.3	1.4	.8	.4	.9
C 3 Loans									
(b) Other Loans	— .4	—	1.7	.5	—2.0	.7	— .5	—	—
C 6 Bonds									
(d) Other Bonds	3.1	— .4	— .6	— .8	1.3	— .3	— .4	.6	2.4
C 7 Stocks	.6	4.8	4.5	13.9	19.7	21.7	16.9	16.6	35.0
D Other Transactions and Errors									
(c) Recorded Payables	.2	—	— .1	.4	—	1.8	— .7	—	.6
Total Credits	4.4	5.4	6.1	14.7	20.3	25.3	16.1	17.6	38.9

SUBSECTOR VII (k): FIRE AND CASUALTY COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 3	Gross Fixed Capital Formation									
	(b) Non-Residential	.3	.1	—	.8	1.4	2.0	1.6	2.4	2.8
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	9.6	8.0	4.7	1.2	3.6	5.4	6.3	—1.1	— .8
	(c) Other Institutional Deposits	.1	— .4	.2	— .2	.3	—	1.5	—	.2
C 4	Claims on Associated Enterprises									
	(b) Corporate	—1.7	— .8	—8.4	—11.2	—2.1	—4.2	—2.1	—11.8	—10.3
C 5	Mortgages	— .9	.8	—1.8	.6	.1	.9	.1	1.0	.9
C 6	Bonds									
	(a) Government of Canada Bonds	8.6	9.7	15.6	14.5	15.5	20.2	22.9	32.8	8.9
	(b) Provincial Bonds	1.5	4.9	9.1	8.3	7.6	5.2	15.8	13.5	12.4
	(c) Municipal Bonds	— .8	— .8	3.7	2.6	2.2	9.0	9.8	12.3	11.8
	(d) Other Bonds	3.5	8.0	10.9	12.7	11.2	12.0	7.5	16.1	5.6
C 7	Stocks	2.4	3.9	— .5	2.4	1.6	.7	2.5	5.6	16.3
D	Other Transactions and Errors									
	(c) Recorded Receivables	5.4	6.8	4.8	3.7	10.5	8.0	8.2	10.0	1.4
	Total Debits	28.0	40.2	38.3	35.4	51.9	59.2	74.1	80.8	49.2

SUBSECTOR VII (k): FIRE AND CASUALTY COMPANIES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)										
B 1	Gross Saving									
	(a) Capital Consumption Allowances, etc.	.1	.1	.1	.1	.2	.3	.3	.5	.6
	(b) Other Saving	2.1	2.5	4.3	6.1	6.2	6.2	8.8	15.3	14.3
C 3	Loans									
	(a) Bank Loans	—	—	—	—	—	.1	—	.1	—
C 4	Claims on Associated Enterprises									
	(b) Corporate	2.4	1.3	2.2	.9	.4	1.1	3.0	—1.6	—9.0
C 7	Stocks	—	.8	.8	.5	.5	1.8	2.7	7.5	2.8
C 8	Insurance and Pensions	.1	—	—	.1	— .1	.5	.5	.2	.5
D	Other Transactions and Errors	23.4	35.5	30.9	27.5	44.7	49.2	58.8	58.8	40.0
	(c) Recorded Payables	22.7	35.9	30.6	27.5	45.1	49.4	58.7	59.2	41.0
	(e) Residual	.7	— .4	.3	—	— .4	— .2	.1	— .4	—1.0
	Total Credits	28.0	40.2	38.3	35.4	51.9	59.2	74.1	80.8	49.2

SUBSECTOR VII (l): FRATERNAL BENEFIT SOCIETIES

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	— .9	2.2	— .8	— .3	—	—1.0	3.0	—	— .5
C 3	Loans									
	(b) Other Loans	—1.3	—1.2	—3.2	— .9	— .7	.2	.3	.3	.7
C 4	Claims on Associated Enterprises									
	(b) Corporate	— .8	.5	.4	—1.7	— .3	.6	— .3	— .2	3.2
C 5	Mortgages	1.1	12.7	12.3	8.4	7.5	—1.3	—1.8	— .3	1.9
C 6	Bonds									
	(a) Government of Canada Bonds	—7.5	—3.1	—6.8	—22.8	—21.3	—7.1	—4.8	7.5	—7.2
	(b) Provincial Bonds	2.6	17.9	—19.9	—55.1	—10.9	9.2	— .1	8.7	—24.9
	(c) Municipal Bonds	9.6	—32.3	10.4	31.6	27.0	4.3	6.0	—5.8	9.7
	(d) Other Bonds	1.7	17.5	16.6	40.7	6.1	2.2	7.0	—3.4	24.8
C 7	Stocks	10.5	1.3	4.1	10.8	1.1	1.0	.7	5.0	8.3
D	Other Transactions and Errors	—3.6	—5.2	—5.9	— .1	.9	9.1	5.4	3.2	11.8
	(a) Transfers of Existing Real Assets	—3.6	—5.0	—5.9	—1.0	— .1	8.3	4.9	3.6	9.5
	(c) Recorded Receivables	—	— .2	—	.9	1.0	.8	.5	— .4	2.3
	Total Debits	11.4	10.3	7.2	10.6	9.4	17.2	15.4	15.0	27.8

SUBSECTOR VII (l): FRATERNAL BENEFIT SOCIETIES

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
C 3 Loans									
(a) Bank Loans	—	— .6	—1.3	—	—	1.6	—1.4	—	—
C 8 Insurance and Pensions	10.8	11.4	8.5	10.6	9.4	14.9	16.3	14.9	26.7
D Other Transactions and Errors	.6	— .5	—	—	—	.7	.5	.1	1.1
(c) Recorded Payables	.3	— .7	.3	— .1	.1	.5	.2	— .5	.3
(e) Residual	.3	.2	— .3	.1	— .1	.2	.3	.6	.8
Total Credits	11.4	10.3	7.2	10.6	9.4	17.2	15.4	15.0	27.8

SUBSECTOR VII (m): GOVERNMENT INSURANCE INSTITUTIONS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
B 3 Gross Fixed Capital Formation									
(b) Non-Residential	—	—	—	—	—	.1	—	.1	— .1
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	.2	— .1	.1	.2	— .3	— .2	.4	.5	.5
C 5 Mortgages	—	—	—	—	—	.1	—	—	—
C 6 Bonds									
(a) Government of Canada Bonds	4.9	5.4	.1	— .3	.9	.7	— .4	— .7	1.4
(b) Provincial Bonds	—	—	—	—	—	—	— .5	1.3	2.4
D Other Transactions and Errors									
(c) Recorded Receivables	—	—	—	—	—	.1	.6	.6	.6
Total Debits	5.1	5.3	.2	— .1	.6	.8	.1	1.8	4.8

SUBSECTOR VII (m): GOVERNMENT INSURANCE INSTITUTIONS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
C 4 Claims on Associated Enterprises									
(c) Government	5.2	5.4	.2	—	.7	.7	— .8	— .6	3.9
D Other Transactions and Errors	— .1	— .1	—	— .1	— .1	.1	.9	2.4	.9
(c) Recorded Payables	—	—	—	—	—	.2	.8	2.3	.8
(e) Residual	— .1	— .1	—	— .1	— .1	— .1	.1	.1	.1
Total Credits	5.1	5.3	.2	— .1	.6	.8	.1	1.8	4.8

SECTOR VIII: FEDERAL GOVERNMENT

Current Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Debits (Expenditures)											
A 1 Labour Service	586	327	349	434	471	614	766	856	986	1,056	1,153
A 2 Capital Service	444	453	453	461	427	427	441	461	504	494	524
A 4 Transfers Including Taxes	1,098	803	720	770	866	836	1,347	1,458	1,591	1,676	1,697
A 5 Goods and Services, n.e.i. (Net)	445	241	227	247	356	819	1,220	1,329	1,177	1,140	1,178
A 6 Gross Saving	—202	745	857	669	785	1,290	756	516	186	490	935
Total Debits	2,371	2,569	2,606	2,581	2,905	3,986	4,530	4,620	4,444	4,856	5,487
Credits (Receipts)											
A 2 Capital Service	149	109	101	123	146	180	231	232	234	267	315
A 4 Transfers Including Taxes	2,222	2,460	2,505	2,458	2,759	3,806	4,299	4,388	4,210	4,589	5,172
Total Credits	2,371	2,569	2,606	2,581	2,905	3,986	4,530	4,620	4,444	4,856	5,487

SECTOR VIII: FEDERAL GOVERNMENT

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 2	Change in Inventories	—27.0	—16.0	—18.0	32.0	—19.0	—16.0	72.0	—24.0	—4.0
B 3	Gross Fixed Capital Formation									
	(a) Residential	39.0	32.0	26.0	28.0	40.0	52.0	38.0	23.0	11.0
	(b) Non-Residential	34.0	45.0	89.0	129.0	129.0	233.0	393.0	375.0	279.0
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	—896.8	—80.2	16.8	—124.4	73.9	—104.9	—157.1	522.3	—265.4
	(c) Other Institutional Deposits	— .2	.1	.2	.2	— .7	.7	—1.0	.3	—
C 3	Loans									
	(b) Other Loans	649.8	563.5	64.0	113.3	—46.8	—56.5	—52.0	—83.9	—52.4
C 4	Claims on Associated Enterprises									
	(c) Government	—115.2	—810.7	633.7	182.1	579.5	377.3	250.0	153.0	—67.1
C 5	Mortgages	18.1	30.1	16.5	14.6	7.9	4.6	2.4	2.7	4.5
C 6	Bonds									
	(a) Government of Canada Bonds	98.1	237.4	108.0	—368.2	54.6	180.2	79.0	209.7	—118.4
	(d) Other Bonds	—	—	—	6.9	3.1	—1.8	.7	—1.1	—1.5
D	Other Transactions and Errors	40.2	—9.1	29.5	28.2	145.9	154.4	31.2	—139.7	—49.3
	(a) Transfers of Existing Real Assets	5.9	3.2	1.6	7.8	4.3	5.0	6.3	6.9	4.8
	(c) Recorded Receivables	34.3	—12.3	27.9	20.4	141.6	149.4	24.9	—146.6	—54.1
	Total Debits	—160.0	—7.9	965.7	41.7	967.4	823.0	656.2	1,037.3	—263.6

SECTOR VIII: FEDERAL GOVERNMENT

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(b) Other Saving	—202.0	745.0	857.0	669.0	785.0	1,290.0	756.0	516.0	186.0
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	2.2	1.5	4.0	4.9	6.8	6.5	6.1	7.6	2.4
C 3 Loans									
(a) Bank Loans	—4.4	—	—	—	—	—	—	—	—
C 6 Bonds									
(a) Government of Canada Bonds	—49.8	—650.8	—179.3	—768.5	112.7	—485.2	—139.3	426.0	—573.2
C 8 Insurance and Pensions	53.6	75.2	84.9	67.5	61.9	58.3	60.9	63.2	62.1
D Other Transactions and Errors	40.4	—178.8	199.1	68.8	1.0	—46.6	—27.5	24.5	59.1
(a) Transfers of Existing Real Assets	15.9	32.6	26.9	21.8	18.4	25.6	19.4	24.3	34.6
(b) Special Deposit and Trust Accounts	—1.8	7.6	3.1	4.5	6.8	7.1	17.5	8.1	—
(c) Recorded Payables	11.2	—32.1	—12.4	3.2	30.0	—52.2	27.7	70.4	—27.5
(e) Residual	15.1	—186.9	181.5	39.3	—54.2	—27.1	—92.1	—78.3	52.0
Total Credits	—160.0	—7.9	965.7	41.7	967.4	823.0	656.2	1,037.3	—263.6

SECTOR IX: PROVINCIAL GOVERNMENTS

Current Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Debits (Expenditures)											
A 1 Labour Service	130	150	182	196	213	241	278	295	320	351	387
A 2 Capital Service	70	68	68	72	76	79	85	91	97	97	106
A 4 Transfers Including Taxes	245	310	400	499	562	622	558	619	688	789	839
A 5 Goods and Services, n.e.i. (Net)	48	69	81	132	122	155	160	133	126	140	202
A 6 Gross Saving	202	270	236	181	263	313	429	470	456	465	486
Total Debits	695	867	967	1,080	1,236	1,410	1,510	1,608	1,687	1,842	2,020
Credits (Receipts)											
A 2 Capital Service	173	179	187	195	211	226	245	271	289	295	319
A 4 Transfers Including Taxes	522	688	780	885	1,025	1,184	1,265	1,337	1,398	1,547	1,701
Total Credits	695	867	967	1,080	1,236	1,410	1,510	1,608	1,687	1,842	2,020

SECTOR IX: PROVINCIAL GOVERNMENTS

Investment, Financial and Other Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
B 2	Change in Inventories	2.0	2.0	4.0	4.0	3.0	5.0	—5.0	1.0	1.0
B 3	Gross Fixed Capital Formation									
	(b) Non-Residential	103.0	161.0	200.0	178.0	197.0	230.0	291.0	266.0	300.0
C 1	Currency and Deposits									
	(b) Currency and Bank Deposits	33.0	—6.0	36.0	18.0	—9.0	27.0	29.0	—48.0	24.0
	(c) Other Institutional Deposits	— .3	2.6	—1.4	.4	— .1	—	1.9	1.0	.2
C 3	Loans									
	(b) Other Loans	—1.1	—18.7	—13.7	2.1	6.0	6.5	12.7	40.4	38.5
C 4	Claims on Associated Enterprises									
	(c) Government	42.6	64.0	69.9	71.6	89.6	229.4	165.3	213.8	136.3
C 5	Mortgages	1.0	.2	4.5	11.5	1.0	3.3	—1.8	— .1	6.2
C 6	Bonds									
	(a) Government of Canada Bonds	—24.8	28.0	.4	27.6	72.9	13.9	12.7	64.5	—59.1
	(b) Provincial Bonds	67.7	22.2	67.3	26.7	32.4	68.7	71.7	73.8	85.8
	(c) Municipal Bonds	—7.7	—4.6	5.5	5.4	9.0	40.5	20.2	—10.4	15.6
	(d) Other Bonds	—2.6	—2.1	.7	1.6	— .1	— .5	20.1	—6.1	—11.0
C 7	Stocks	.1	—	—	—	—	—	—	—	—
D	Other Transactions and Errors	1.1	8.9	2.1	7.0	4.6	6.3	16.5	15.3	15.8
	(a) Transfers of Existing Real Assets	3.5	5.6	7.6	6.2	6.9	6.9	9.7	10.6	13.6
	(b) Special Deposit and Trust Accounts	—	—	—	—	—	—8.2	— .9	—	—
	(c) Recorded Receivables	—2.4	3.3	—5.5	.8	—2.3	7.6	7.7	4.7	2.2
	Total Debits	214.0	257.5	375.3	353.9	406.3	630.1	634.3	611.2	553.3

SECTOR IX: PROVINCIAL GOVERNMENTS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(b) Other Saving	202.0	270.0	236.0	181.0	263.0	313.0	429.0	470.0	456.0
C 3 Loans									
(a) Bank Loans	—11.0	24.0	26.1	—19.2	4.2	.6	11.7	—13.9	—3.5
(b) Other Loans	—2.4	—2.0	—5.0	—3.8	—2.9	—2.8	—3.5	—3.5	—3.4
C 4 Claims on Associated Enterprises									
(c) Government	—	.2	.1	— .1	.2	—	— .4	—	—
C 6 Bonds									
(b) Provincial Bonds	6.4	7.6	121.4	102.9	107.2	278.1	57.0	119.5	75.9
D Other Transactions and Errors	19.0	—42.3	—3.3	93.1	34.6	41.2	140.5	39.1	28.3
(a) Transfers of Existing Real Assets	2.1	2.2	11.0	22.0	3.1	14.7	22.0	45.8	43.1
(b) Special Deposit and Trust Accounts	24.7	2.3	.5	1.5	— .2	—1.6	5.9	4.0	23.7
(c) Recorded Payables	12.9	8.7	—5.7	9.4	11.8	—2.2	—1.6	2.0	—4.6
(e) Residual	—20.7	—55.3	—9.1	60.2	19.9	30.3	114.2	—12.7	—33.9
Total Credits	214.0	257.5	375.3	353.9	406.3	630.1	634.3	611.2	553.3

SECTOR X: MUNICIPAL GOVERNMENTS

Current Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Debits (Expenditures)											
A 1 Labour Service	237	269	320	357	383	435	496	549	606	666	738
A 2 Capital Service	40	38	37	39	42	47	54	58	68	79	88
A 4 Transfers Including Taxes	23	26	30	33	35	43	50	53	59	64	71
A 5 Goods and Services, n.e.i. (Net)	89	144	184	218	227	238	252	315	307	388	346
A 6 Gross Saving	107	79	69	66	109	151	175	144	166	170	220
Total Debits	496	556	640	713	796	914	1,027	1,119	1,206	1,367	1,463
Credits (Receipts)											
A 2 Capital Service	82	87	98	101	114	128	141	148	164	180	185
A 4 Transfers Including Taxes	414	469	542	612	682	786	886	971	1,042	1,187	1,278
Total Credits	496	556	640	713	796	914	1,027	1,119	1,206	1,367	1,463

SECTOR X: MUNICIPAL GOVERNMENTS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
B 3 Gross Fixed Capital Formation									
(b) Non-Residential	110.0	117.0	153.0	172.0	222.0	265.0	318.0	314.0	352.0
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	6.5	8.2	10.1	8.7	12.0	21.7	1.6	13.1	14.7
C 3 Loans									
(b) Other Loans	—5.4	—18.7	—8.3	—2.0	.2	—5.3	3.9	.1	—3.0
C 4 Claims on Associated Enterprises									
(c) Government	— .2	15.2	22.3	27.7	31.7	38.1	31.6	80.0	58.1
C 5 Mortgages	.6	—1.0	.3	—	—	—	.5	—	—
C 6 Bonds									
(a) Government of Canada Bonds	5.2	7.7	—12.6	—3.7	—2.7	—17.5	— .3	—2.3	1.7
(b) Provincial Bonds	—1.8	—1.5	—1.8	.3	—1.0	—6.1	—	— .8	5.6
(c) Municipal Bonds	—16.5	—16.7	1.4	5.4	—3.1	—19.6	— .3	—2.6	7.0
D Other Transactions and Errors	16.6	51.3	10.6	26.9	36.2	49.0	21.1	63.7	39.0
(c) Recorded Receivables	—2.7	1.3	13.1	15.2	12.2	19.0	6.0	20.4	32.2
(d) Unclassified Transactions	19.3	50.0	—2.5	11.7	24.0	30.0	15.1	43.3	6.8
Total Debits	115.0	161.5	175.0	235.3	295.3	325.3	376.1	465.2	475.1

SECTOR X: MUNICIPAL GOVERNMENTS

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(b) Other Saving	107.0	79.0	69.0	66.0	109.0	151.0	175.0	144.0	166.0
C 3 Loans									
(a) Bank Loans	4.0	16.0	13.7	16.3	13.2	4.6	3.5	.4	10.5
(b) Other Loans	.3	—20.1	—15.2	.1	4.8	—6.7	— .3	51.0	26.4
C 4 Claims on Associated Enterprises									
(c) Government	—	5.7	—1.8	1.2	—1.3	—3.7	2.3	2.5	2.2
C 6 Bonds									
(b) Provincial Bonds	.3	— .4	71.4	—15.5	—6.1	3.5	8.0	22.1	14.4
(c) Municipal Bonds	—21.2	23.2	—22.0	116.4	131.3	166.5	163.7	160.7	247.9
D Other Transactions and Errors	24.6	58.1	59.9	50.8	44.4	10.1	23.9	84.5	7.7
(b) Special Deposit and Trust Accounts	—	—	—	—	—	—	3.1	.4	—2.9
(c) Recorded Payables	—3.6	2.1	15.2	2.8	4.1	19.2	9.4	17.8	—1.5
(d) Unclassified Transactions	12.9	28.4	—1.0	5.1	15.5	10.6	—10.1	18.1	5.9
(e) Residual	15.3	27.6	45.7	42.9	24.8	—19.7	21.5	48.2	6.2
Total Credits	115.0	161.5	175.0	235.3	295.3	325.3	376.1	165.2	475.1

SECTOR XI: REST OF THE WORLD

Current Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Debits (Expenditures)											
A 2 Capital Service	70	64	70	83	91	115	145	165	147	160	140
A 5 Goods and Services, n.e.i.	3,140	3,576	3,980	3,938	4,092	4,974	5,428	5,235	5,000	5,604	6,199
A 6 Gross Saving	—333	—19	—417	—168	330	524	—173	443	427	679	1,358
Total Debits	2,877	3,621	3,633	3,853	4,513	5,613	5,400	5,843	5,574	6,443	7,697
Credits (Receipts)											
A 2 Capital Service	312	337	325	390	475	450	413	404	423	483	530
A 5 Goods and Services, n.e.i.	2,565	3,284	3,308	3,463	4,038	5,163	4,987	5,439	5,151	5,960	7,167
Total Credits	2,877	3,621	3,633	3,853	4,513	5,613	5,400	5,843	5,574	6,443	7,697

SECTOR XI: REST OF THE WORLD

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
C 1 Currency and Deposits									
(b) Currency and Bank Deposits	—79.0	3.5	—27.4	40.4	209.0	—188.9	—70.9	9.5	66.8
(c) Other Institutional Deposits	1.3	1.3	— .1	—3.4	.6	—1.7	—1.4	—4.4	— .9
C 3 Loans									
(b) Other Loans	—	—	—	—	—	25.0	22.2	20.0	—
C 4 Claims on Associated Enterprises									
(b) Corporate	40.0	61.0	71.0	94.0	222.0	309.0	346.0	426.0	392.0
C 6 Bonds									
(a) Government of Canada Bonds	—16.7	—47.0	100.1	10.5	153.2	—166.0	—172.6	—127.8	—109.8
(b) Provincial Bonds	—26.0	—52.0	—25.4	—6.0	28.7	218.5	45.5	107.0	33.9
(c) Municipal Bonds	—41.9	—3.3	—19.7	—2.1	10.5	63.2	24.7	57.4	20.0
(d) Other Bonds	—19.5	—144.9	—23.5	—19.0	33.8	43.0	158.3	77.5	126.1
C 7 Stocks	—23.7	—34.1	7.1	—10.2	25.7	107.2	93.3	60.9	140.2
C 9 Foreign Inheritances and Migrants' Funds	65.0	69.0	84.0	68.0	57.0	77.0	85.0	91.0	89.0
Total Debits	—100.5	—146.5	166.1	172.2	740.5	486.3	530.1	717.1	757.3

SECTOR XI: REST OF THE WORLD

Investment, Financial and Other Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
B 1 Gross Saving									
(b) Other Saving	—333.0	—19.0	—417.0	—168.0	330.0	524.0	—173.0	443.0	427.0
C 1 Currency and Deposits									
(a) Gold	204.4	—249.4	114.7	89.2	101.3	273.7	42.9	99.5	84.2
(b) Currency and Bank Deposits	—426.0	28.3	—42.5	14.3	2.1	19.8	33.7	57.2	71.4
C 3 Loans									
(a) Bank Loans	—	—	6.0	4.3	—	—	—	—	2.1
(b) Other Loans	626.1	559.0	62.0	111.2	—50.0	—60.3	—51.0	—75.6	—57.2
C 4 Claims on Associated Enterprises									
(b) Corporate	26.9	43.8	—40.5	—73.8	—8.4	30.4	89.0	78.1	112.8
C 6 Bonds									
(d) Other Bonds	—199.2	—518.6	419.5	41.8	517.2	—244.7	90.8	—130.0	56.5
C 7 Stocks	—22.5	— .9	8.7	—20.8	—56.5	—10.7	—6.0	—13.8	—3.4
C 9 Foreign Inheritances and Migrants' Funds	35.0	49.0	50.0	59.0	61.0	70.0	144.0	116.0	94.0
D Other Transactions and Errors	—12.2	—38.7	5.2	115.0	156.2	—115.9	359.7	142.7	—30.1
(c) Recorded Payables (net)	—3.9	—5.3	—20.0	59.0	—208.2	—118.1	367.2	125.1	—23.2
(d) Unclassified Transactions	4.2	—24.0	.5	13.3	8.7	—9.0	—18.2	—17.2	—13.4
(e) Residual	—12.5	—57.4	24.7	42.7	43.3	11.2	10.7	34.8	6.5
Total Credits	—100.5	—146.5	166.1	172.2	740.5	486.3	530.1	717.1	757.3

CATEGORY B 1: GROSS SAVING

Sector and Subsector Credits

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits	**(Liability Items)**									
S I	Consumers	892.0	494.0	994.0	926.0	662.0	1,334.0	1,291.0	1,312.0	809.0
S II	Unincorporated Business	477.0	544.0	625.0	742.0	857.0	993.0	1,045.0	1,111.0	1,170.0
S III	Non-Financial Corporations	673.3	542.5	774.6	1,122.4	1,089.6	813.4	2,249.0	2,271.2	2,063.8
S IV	Government Business Enterprises: Total	122.0	131.0	12.0	19.0	311.0	157.0	227.0	181.0	219.0
	(a) Federal Enterprises	49.0	57.0	—72.0	—80.0	202.0	38.0	111.0	37.0	56.0
	(b) Provincial and Municipal Enterprises	48.0	47.0	48.0	60.0	66.0	71.0	73.0	87.0	102.0
	(c) Operation of Government Buildings	25.0	27.0	36.0	39.0	43.0	48.0	53.0	57.0	61.0
S V	Banking: Total	30.1	28.3	26.0	33.8	36.4	40.3	40.3	59.7	34.2
	(a) Bank of Canada	.1	.1	.1	.7	.3	.3	.3	.3	.3
	(c) Chartered Banks	30.0	28.2	25.9	33.1	36.1	40.0	40.0	59.4	33.9
S VI	Life Insurance: Total	1.6	.5	1.6	1.8	2.6	2.3	2.6	4.0	3.5
	(a) Canadian Federal Companies	1.5	.4	1.4	1.7	2.4	2.0	2.4	3.7	3.4
	(b) Provincial Companies	—	—	—	—	.1	.1	.1	.1	.1
	(c) British and Foreign Companies	.1	.1	.2	.1	.1	.2	.1	.2	—
S VII	Other Financial Institutions: Total	12.0	13.7	7.8	31.0	24.4	24.0	28.1	24.1	53.5
	(a) Quebec Savings Banks	.7	.1	— .3	.3	.3	.3	.4	.4	1.0
	(b) Credit Unions	1.6	1.7	—5.8	11.6	1.1	2.9	2.5	—10.8	17.8
	(d) Trust Companies	1.5	1.6	1.2	2.2	1.9	1.9	1.8	2.0	2.4
	(e) Mortgage Loan Companies	1.6	2.1	2.2	1.6	4.3	2.0	2.5	2.9	4.9
	(f) C.M.H.C. and V.L.A. Housing	—	—	2.2	3.5	4.0	3.5	3.8	2.7	2.7
	(h) Instalment Finance Companies	2.9	4.3	3.0	3.9	4.1	4.3	6.2	5.0	4.6
	(i) Small Loan Companies, etc.	.7	.3	.3	.8	1.0	1.2	1.0	5.7	4.3
	(j) Investment Companies	.9	1.0	.6	.7	1.3	1.4	.8	.4	.9
	(k) Fire and Casualty Companies	2.1	2.6	4.4	6.4	6.4	6.5	9.1	15.8	14.9
S VIII	Federal Government	—202.0	745.0	857.0	669.0	785.0	1,290.0	756.0	516.0	186.0
S IX	Provincial Governments	202.0	270.0	236.0	181.0	263.0	313.0	429.0	470.0	456.0
S X	Municipal Governments	107.0	79.0	69.0	66.0	109.0	151.0	175.0	144.0	166.0
S XI	Rest of the World	—333.0	—19.0	—417.0	—168.0	330.0	524.0	—173.0	443.0	427.0
	Total Credits	1,982.0	2,829.0	3,186.0	3,624.0	4,470.0	5,642.0	6,070.0	6,536.0	5,588.0

CATEGORY B 1 (a): CAPITAL CONSUMPTION ALLOWANCES, ETC.

Sector and Subsector Credits

(millions of dollars)

Credits (Liability Items)		1946	1947	1948	1949	1950	1951	1952	1953	1954
S II	Unincorporated Business	477.0	544.0	625.0	742.0	857.0	993.0	1,045.0	1,111.0	1,170.0
S III	Non-Financial Corporations	415.0	576.1	695.4	789.8	896.8	1,025.5	1,177.8	1,341.5	1,507.1
S IV	Government Business Enterprises: Total	100.0	97.0	112.0	130.0	145.0	169.0	184.0	205.0	211.0
	(a) Federal Enterprises	27.0	23.0	28.0	31.0	36.0	50.0	58.0	61.0	48.0
	(b) Provincial and Municipal Enterprises	48.0	47.0	48.0	60.0	66.0	71.0	73.0	87.0	102.0
	(c) Operation of Government Buildings	25.0	27.0	36.0	39.0	45.0	48.0	53.0	57.0	61.0
S V	Banking: Total	3.5	3.6	3.7	4.9	7.0	7.8	7.3	7.4	9.3
	(a) Bank of Canada	.1	.1	.1	.7	.3	.3	.3	.3	.3
	(c) Chartered Banks	3.4	3.5	3.6	4.2	6.7	7.5	7.0	7.1	9.0
S VI	Life Insurance: Total	1.3	1.1	1.5	1.5	1.7	2.6	2.4	3.3	2.6
	(a) Canadian Federal Companies	1.2	1.0	1.3	1.4	1.6	2.4	2.3	3.1	2.6
	(c) British and Foreign Companies	.1	.1	.2	.1	.1	.2	.1	.2	—
S VII	Other Financial Institutions: Total	1.1	1.2	3.4	4.8	5.5	5.1	5.5	4.8	5.0
	(a) Quebec Savings Banks	.1	.1	.1	.1	.1	.1	.1	.2	.2
	(b) Credit Unions	.1	.1	.1	.1	.2	.2	.2	.3	.4
	(d) Trust Companies	.4	.4	.4	.5	.5	.5	.5	.5	.5
	(e) Mortgage Loan Companies	.5	.5	.5	.5	.5	.5	.6	.6	.6
	(f) C.M.H.C. and V.L.A. Housing	—	—	2.2	3.5	4.0	3.5	3.8	2.7	2.7
	(k) Fire and Casualty Companies	.1	.1	.1	.1	.2	.3	.3	.5	.6
	Total Credits	998.0	1,223.0	1,441.0	1,673.0	1,913.0	2,203.0	2,422.0	2,673.0	2,905.0

CATEGORY B 1 (b): OTHER SAVING

Sector and Subsector Credits

(millions of dollars)

Credits (Liability Items)		1946	1947	1948	1949	1950	1951	1952	1953	1954
S I	Consumers	892.0	494.0	994.0	926.0	662.0	1,334.0	1,291.0	1,312.0	809.0
S III	Non-Financial Corporations	196.3	20.4	257.2	419.6	328.8	—32.1	668.2	645.7	582.7
S IV	Government Business Enterprises									
	(a) Federal Enterprises	22.0	34.0	—100.0	—111.0	166.0	—12.0	43.0	—24.0	8.0
S V	Banking									
	(c) Chartered Banks	26.6	24.7	22.3	28.9	29.4	32.5	33.0	52.3	24.9
S VI	Life Insurance: Total	.3	— .6	.1	.3	.9	— .3	.2	.7	.9
	(a) Canadian Federal Companies	.3	— .6	.1	.3	.8	— .4	.1	.6	.8
	(b) Provincial Companies	—	—	—	—	.1	.1	.1	.1	.1
S VII	Other Financial Institutions: Total	10.8	12.5	4.4	26.2	18.9	18.9	22.6	19.3	48.5
	(a) Quebec Savings Banks	.6	—	— .4	.2	.2	.2	.3	.2	.8
	(b) Credit Unions	1.5	1.6	—5.9	11.5	.9	2.7	2.3	—11.1	17.4
	(d) Trust Companies	1.1	1.2	.8	1.7	1.4	1.4	1.3	1.5	1.9
	(e) Mortgage Loan Companies	1.1	1.6	1.7	1.1	3.8	1.5	1.9	2.3	4.3
	(h) Instalment Finance Companies	2.9	4.3	3.0	3.9	4.1	4.3	6.2	5.0	4.6
	(i) Small Loan Companies, etc.	.7	.3	.3	.8	1.0	1.2	1.0	5.7	4.3
	(j) Investment Companies	.9	1.0	.6	.7	1.3	1.4	.8	.4	.9
	(k) Fire and Casualty Companies	2.0	2.5	4.3	6.3	6.2	6.2	8.8	15.3	14.3
S VIII	Federal Government	—202.0	745.0	857.0	669.0	785.0	1,290.0	756.0	516.0	186.0
S IX	Provincial Governments	202.0	270.0	236.0	181.0	263.0	313.0	429.0	470.0	456.0
S X	Municipal Governments	107.0	79.0	69.0	66.0	109.0	151.0	175.0	144.0	166.0
S XI	Rest of the World	—333.0	—19.0	—417.0	—168.0	330.0	524.0	—173.0	443.0	427.0
	Total Credits	922.0	1,660.0	1,923.0	2,038.0	2,693.0	3,619.0	3,245.0	3,579.0	2,709.0

CATEGORY B 1 (c): RESIDUAL ERROR OF THE NATIONAL ACCOUNTS

Sector Credits

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)									
S III Non-Financial Corporations	62.0	—54.0	—178.0	—87.0	—136.0	—180.0	403.0	284.0	—26.0

CATEGORY B 2: CHANGE IN INVENTORIES

Sector and Subsector Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
S II Unincorporated Business	101.0	49.0	—4.0	—33.0	197.0	335.0	344.0	179.0	—46.0
S III Non-Financial Corporations	263.2	316.5	20.1	62.1	243.2	544.5	36.8	233.1	—47.3
S IV Government Business Enterprises: Total	—31.2	37.5	95.4	20.0	110.9	34.6	131.2	170.9	—36.7
(a) Federal Enterprises	—43.5	17.0	73.2	—5.1	88.5	26.3	127.5	172.6	—30.1
(b) Provincial and Municipal Enterprises	12.3	20.5	22.2	25.1	22.4	8.3	3.7	—1.7	—6.6
S VII Other Financial Institutions	—	—	1.5	— .1	—1.1	— .1	—	—	—
S VIII Federal Government	—27.0	—16.0	—18.0	32.0	—19.0	—16.0	72.0	—24.0	—4.0
S IX Provincial Governments	2.0	2.0	4.0	4.0	3.0	5.0	—5.0	1.0	1.0
Total Debits	308.0	389.0	99.0	85.0	534.0	903.0	579.0	560.0	—133.0

CATEGORY B 3: GROSS FIXED CAPITAL FORMATION
(a): RESIDENTIAL

Sector Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
S II Unincorporated Business	335.0	467.0	540.0	713.0	823.0	845.0	873.0	1,092.0	1,158.0
S III Non-Financial Corporations	18.0	25.0	28.0	38.0	43.0	44.0	46.0	57.0	61.0
S VII Other Financial Institutions									
(f) C.M.H.C. and V.L.A. Housing	15.0	2.0	41.0	43.0	17.0	6.0	14.0	17.0	8.0
S VIII Federal Government	39.0	32.0	26.0	28.0	40.0	52.0	38.0	23.0	11.0
Total Debits	407.0	526.0	635.0	822.0	923.0	947.0	971.0	1,189.0	1,238.0

CATEGORY B 3: GROSS FIXED CAPITAL FORMATION (b): NON-RESIDENTIAL

Sector and Subsector Transactions

(millions of dollars)

Debits (Asset Items)		1946	1947	1948	1949	1950	1951	1952	1953	1954
S II	Unincorporated Business	323.0	485.0	637.0	752.0	845.0	890.0	901.0	1,017.0	886.0
S III	Non-Financial Corporations	595.2	922.1	1,085.5	1,096.9	1,188.0	1,651.0	2,034.8	2,146.4	1,981.9
S IV	Government Business Enterprises: Total	94.3	173.8	272.1	369.8	405.4	485.2	552.8	631.7	638.7
	(a) Federal Enterprises	40.1	63.3	89.0	84.0	60.0	111.0	153.0	148.0	186.4
	(b) Provincial and Municipal Enterprises	54.2	110.5	183.1	285.8	345.4	374.2	399.8	483.7	452.3
S V	Banking: Total	6.0	8.0	11.0	13.0	19.0	25.0	14.0	15.0	20.0
	(a) Bank of Canada	.7	—	.3	1.8	1.7	.3	.3	.1	.4
	(c) Chartered Banks	3.4	9.2	10.5	14.1	26.6	20.3	12.0	—7.9	13.0
	Adjustment for Existing Assets	1.9	—1.2	.2	—2.9	—9.3	4.4	1.7	22.8	6.6
S VI	Life Insurance: Total	.3	.4	.9	2.2	3.9	5.1	4.2	6.5	11.7
	(a) Canadian Federal Companies	.3	.4	.8	2.0	3.4	4.8	3.9	6.1	11.1
	(b) Provincial Companies	— .1	—	—	.1	.1	.2	.2	.3	.3
	(c) British and Foreign Companies	.1	—	.1	.1	.4	.1	.1	.1	.3
S VII	Other Financial Institutions: Total	1.2	1.7	3.5	4.1	3.7	7.7	11.2	15.4	13.7
	(a) Quebec Saving Banks	—	.1	.3	.3	.1	.4	.3	.4	.8
	(b) Credit Unions	.2	.9	.8	1.0	1.4	—	2.0	1.5	2.3
	(c) Government Savings Institutions	.1	—	— .2	—	.1	—	—	.1	—
	(d) Trust Companies	— .5	.1	1.8	.9	.6	—	.4	1.2	2.4
	(e) Mortgage Loan Companies	—1.2	—	.6	.1	.7	2.1	1.4	1.2	.4
	(f) C.M.H.C. and V.L.A. Housing	—	.1	.1	.2	.5	1.6	1.0	1.2	1.0
	(h) Instalment Finance Companies	.1	.1	.2	.5	.3	.2	.6	1.2	— .2
	(i) Small Loan Companies, etc.	.1	— .1	.2	.3	.2	.5	.5	.2	.7
	(k) Fire and Casualty Companies	.3	.1	—	.8	1.4	2.0	1.6	2.4	2.8
	(m) Government Insurance Institutions	—	—	—	—	—	.1	—	.1	— .1
	Adjustment for Existing Assets	2.1	.4	— .3	—	—1.6	.8	3.4	5.9	3.6
S VIII	Federal Government	34.0	45.0	89.0	129.0	129.0	233.0	393.0	375.0	279.0
S IX	Provincial Governments	103.0	161.0	200.0	178.0	197.0	230.0	291.0	266.0	300.0
S X	Municipal Governments	110.0	117.0	153.0	172.0	222.0	265.0	318.0	314.0	352.0
	Total Debits	1,267.0	1,914.0	2,152.0	2,717.0	3,013.0	3,792.0	4,520.0	4,787.0	4,183.0

SAVING MINUS INVESTMENT

Sector Credits*

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
S I	Consumers	892.0	494.0	994.0	926.0	662.0	1,334.0	1,291.0	1,312.0	809.0
S II	Unincorporated Business	—282.0	—457.0	—548.0	—690.0	—1,008.0	—1,077.0	—1,073.0	—1,177.0	—828.0
S III	Non-Financial Corporations	—203.1	—721.1	—359.0	—74.6	—384.6	—1,426.1	131.4	—165.3	—68.2
S IV	Government Business Enterprises	58.9	—80.3	—355.5	—370.8	—205.3	—362.8	—457.0	—621.6	—683.0
S V	Banking	24.1	20.3	15.0	20.8	17.4	15.3	26.3	44.7	14.2
S VI	Life Insurance	1.3	.1	.7	— .4	—1.3	—2.8	—1.6	—2.5	—8.2
S VII	Other Financial Institutions	—4.2	10.0	—38.2	—16.0	4.8	10.4	2.9	—8.3	31.8
S VIII	Federal Government	—248.0	684.0	760.0	480.0	635.0	1,021.0	253.0	142.0	—100.0
S IX	Provincial Governments	97.0	107.0	32.0	—1.0	63.0	78.0	143.0	203.0	155.0
S X	Municipal Governments	—3.0	—38.0	—84.0	—106.0	—113.0	—114.0	—143.0	—170.0	—186.0
S XI	Rest of the World	—333.0	—19.0	—417.0	—168.0	330.0	524.0	—173.0	443.0	427.0
	Total Credits	—	—	—	—	—	—	—	—	—

* As recorded in the C Account.

CATEGORY C 1 (a): GOLD

Sector Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
S V (b) Exchange Fund	204.4	—249.4	114.7	89.2	101.3	273.7	42.9	99.5	84.2
Credits (Liability Items)									
S IX Rest of the World	204.4	—249.4	114.7	89.2	101.3	273.7	42.9	99.5	84.2

CATEGORY C 1 (b): CURRENCY AND BANK DEPOSITS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S I	Consumers: Total	703.6	198.8	526.5	224.7	156.3	255.7	538.6	146.3	680.2
	Notes and Coin	39.0	16.0	69.0	3.0	30.0	58.0	97.0	50.0	27.0
	Personal Savings Deposits	544.0	274.0	299.0	334.0	90.0	120.0	304.0	156.0	462.0
	Other Deposits Less Float	120.6	—91.2	158.5	—112.3	36.3	77.7	137.6	—59.7	191.2
S III	Non-Financial Corporations	39.9	21.3	101.5	67.9	117.6	—117.0	126.2	75.7	116.1
S IV	Government Business Enterprises: Total	79.8	—10.6	17.8	—47.6	25.7	12.0	9.8	—50.7	—2.4
	(a) Federal Enterprises	65.8	—6.4	16.1	—69.0	26.7	14.4	12.2	—63.3	8.6
	(b) Provincial and Municipal Enterprises	14.0	—4.2	1.7	21.4	—1.0	—2.4	—2.4	12.6	—11.0
S V	Banking: Total	—117.2	—18.7	—9.0	91.7	247.7	98.2	—120.9	—47.7	—104.9
	(a) Bank of Canada: Coin	—	— .2	—	—	.3	—	—	—	— .1
	Foreign Currency	—155.9	1.2	—1.7	69.8	46.2	11.9	—38.0	—22.5	— .2
	(b) Exchange Fund: Canadian Dollars	—	—	—	—	—	3.9	—4.5	5.2	—4.1
	Foreign Currency	—19.2	1.4	—18.2	9.3	123.2	6.0	—94.7	—33.8	—10.7
	(c) Chartered Banks: Canadian Dollars	58.9	—22.1	17.9	10.6	59.0	82.4	8.3	—9.6	—92.8
	Foreign Currency	—1.0	1.0	—7.0	2.0	19.0	—6.0	8.0	13.0	3.0
S VI	Life Insurance: Total	10.7	3.2	—8.5	5.9	6.1	—6.9	6.1	—10.3	—7.4
	(a) Canadian Federal Companies	3.5	7.1	—4.6	—2.3	5.6	—2.1	3.6	—8.1	.7
	(b) Provincial Companies	—	.7	— .2	— .2	.1	.8	— .2	— .2	— .2
	(c) British and Foreign Companies	7.2	—4.6	—3.7	8.4	.4	—5.6	2.7	—2.0	—7.9

CATEGORY C 1 (b): CURRENCY AND BANK DEPOSITS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits *(Continued)*										
S VII	Other Financial Institutions: Total	21.1	32.0	6.8	5.6	13.5	51.0	19.3	—6.9	39.6
	(a) Quebec Savings Banks	1.5	2.2	— .8	3.2	— .1	3.5	— .8	.3	3.6
	(b) Credit Unions	7.5	1.6	6.3	—2.1	1.6	14.9	4.9	—5.1	19.9
	(c) Government Savings Institutions	—1.2	2.7	— .4	.7	—2.3	— .2	5.8	—4.1	3.8
	(d) Trust Companies	1.0	.1	2.4	— .3	5.3	—2.1	10.2	—6.8	7.4
	(e) Mortgage Loan Companies	2.5	1.1	.7	—2.0	3.9	2.7	—4.4	— .6	1.5
	(f) C.M.H.C. and V.L.A. Housing	.4	.6	.4	1.9	.9	.1	2.0	— .1	—2.9
	(g) Other Government Lending Institutions	.2	—	— .2	.2	.7	— .3	.6	.2	—
	(h) Instalment Finance Companies	.9	4.3	—1.9	2.6	.2	19.5	—5.3	10.2	3.0
	(i) Small Loan Companies, etc.	— .7	1.5	2.0	—1.6	— .2	.6	1.3	— .5	.1
	(j) Investment Companies	.1	7.8	—5.7	1.9	.2	8.1	—4.8	.2	4.0
	(k) Fire and Casualty Companies	9.6	8.0	4.7	1.2	3.6	5.4	6.3	—1.1	— .8
	(l) Fraternal Benefit Societies	— .9	2.2	— .8	— .3	—	—1.0	3.0	—	— .5
	(m) Government Insurance Institutions	.2	— .1	.1	.2	— .3	— .2	.4	.5	.5
S VIII	Federal Government: Total	—896.8	—80.2	16.8	—124.4	73.9	—104.9	—157.1	522.3	—265.4
	Canadian Dollars	—647.3	—99.0	40.5	—137.2	96.1	—126.0	—136.7	502.3	—273.1
	Foreign Currency	—249.5	18.8	—23.7	12.8	—22.2	21.1	—20.4	20.0	7.7
S IX	Provincial Governments	33.0	—6.0	36.0	18.0	—9.0	27.0	29.0	—48.0	24.0
S X	Municipal Governments	6.5	8.2	10.1	8.7	12.0	21.7	1.6	13.1	14.7
S XI	Rest of the World: Total	—79.0	3.5	—27.4	40.4	209.0	—188.9	—70.9	9.5	66.8
	Canadian Dollars	76.9	2.5	—25.8	40.8	209.0	—194.1	—70.4	—12.1	30.2
	Foreign Currency	—155.9	1.0	—1.6	— .4	—	5.2	— .5	21.6	36.6
	Total Debits	—198.4	151.5	670.6	291.0	852.9	47.9	381.6	603.3	561.2
Credits (Liability Items)										
S V	Banking: Total	225.4	121.7	709.1	271.7	843.9	21.6	341.9	538.5	487.5
	(a) Bank of Canada: Canadian Dollars	72.6	—22.1	131.7	—8.8	171.0	66.4	4.4	55.5	—64.1
	Foreign Currency	—155.9	1.0	—1.6	74.8	74.5	35.4	—68.5	—19.9	— .3
	(c) Chartered Banks: Canadian Dollars	292.7	139.8	586.0	223.7	523.4	—90.2	420.0	473.9	510.9
	Foreign Currency	16.0	3.0	—7.0	—18.0	75.0	10.0	—14.0	29.0	41.0
S VIII	Federal Government: Coinage	2.2	1.5	4.0	4.9	6.8	6.5	6.1	7.6	2.4
S XI	Rest of the World: Foreign Currency	—426.0	28.3	—42.5	14.3	2.1	19.8	33.7	57.2	71.4
	Total Credits	—198.4	151.5	670.6	291.0	852.9	47.9	381.6	603.3	561.2

CATEGORY C 1 (c): OTHER INSTITUTIONAL DEPOSITS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S I	Consumers	121.2	75.2	84.2	84.2	74.3	77.3	119.0	99.7	240.8
S III	Non-Financial Corporations	20.2	11.7	14.1	15.0	14.4	11.0	11.4	6.9	65.7
S IV	Government Business Enterprises									
	(a) Federal Enterprises	—	—	—	—	—	—	—	.3	.1
S VII	Other Financial Institutions: Total	.8	.3	—1.4	.7	1.4	—1.9	2.3	1.7	—1.2
	(c) Government Savings Institutions	—	—	—	—	—	—	— .2	— .1	—
	(d) Trust Companies	.5	.5	—1.4	.4	—	.1	— .2	1.2	— .7
	(e) Mortgage Loan Companies	.2	.2	— .2	.5	1.1	—2.0	1.2	.6	— .7
	(k) Fire and Casualty Companies	.1	— .4	.2	— .2	.3	—	1.5	—	.2
S VIII	Federal Government	— .2	.1	.2	.2	— .7	.7	—1.0	.3	—
S IX	Provincial Governments	— .3	2.6	—1.4	.4	— .1	—	1.9	1.0	.2
S XI	Rest of the World	1.3	1.3	— .1	—3.4	.6	—1.7	—1.4	—4.4	— .9
	Total Debits	143.0	91.2	95.6	97.1	89.9	85.4	132.2	105.5	304.7
Credits (Liability Items)										
S VII	Other Financial Institutions									
	(a) Quebec Savings Banks	16.4	14.5	11.2	14.0	4.4	2.8	11.7	6.9	15.6
	(b) Credit Unions	39.6	27.2	33.5	24.5	24.8	45.4	61.5	58.1	57.1
	(c) Government Savings Institutions	18.5	6.5	4.7	5.1	—1.5	2.8	12.5	5.8	12.7
	(d) Trust Companies	41.6	22.7	29.2	31.2	36.7	11.4	20.2	3.8	146.9
	(e) Mortgage Loan Companies	26.9	20.3	17.0	22.3	25.5	23.0	26.3	30.9	72.4
	Total Credits	143.0	91.2	95.6	97.1	89.9	85.4	132.2	105.5	304.7

CATEGORY C 2 (a): CONSUMER CHARGE ACCOUNTS

Sector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S II	Unincorporated Business	11.0	30.0	16.3	8.0	12.1	9.1	7.5	12.8	9.8
S III	Non-Financial Corporations	16.0	40.0	19.7	11.8	14.8	19.6	17.6	18.2	13.6
	Total Debits	27.0	70.0	36.0	19.8	26.9	28.7	25.1	31.0	23.4
Credits (Liability Items)										
S I	Consumers	27.0	70.0	36.0	19.8	26.9	28.7	25.1	31.0	23.4

CATEGORY C 2 (b): INSTALMENT CREDIT

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S II	Unincorporated Business	5.5	12.0	5.0	12.5	16.7	—21.9	33.4	10.4	11.6
S III	Non-Financial Corporations	7.5	32.0	17.0	22.5	21.7	—54.1	86.4	31.2	27.2
S VII	Other Financial Institutions: Total	29.0	63.6	23.5	54.0	109.0	20.1	226.7	160.8	—44.8
	(h) Instalment Finance Companies	29.0	63.6	23.5	54.0	106.6	18.3	225.4	159.9	—46.1
	(i) Small Loan Companies, etc.	—	—	—	—	2.4	1.8	1.3	.9	1.3
	Total Debits	42.0	107.6	45.5	89.0	147.4	—55.9	346.5	202.4	—6.0
Credits (Liability Items)										
S I	Consumers	28.0	68.3	43.9	80.0	124.2	—92.7	307.2	184.1	13.6
S II	Unincorporated Business	14.0	39.3	1.6	9.0	23.2	36.8	39.3	18.3	—19.6
	Total Credits	42.0	107.6	45.5	89.0	147.4	—55.9	346.5	202.4	—6.0

CATEGORY C 3 (a): BANK LOANS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S V	Banking									
	(c) Chartered Banks	103.0	476.0	193.0	94.8	500.0	229.0	349.0	627.3	60.3
Credits (Liability Items)										
S I	Consumers	7.0	21.0	31.5	23.9	110.5	—18.8	75.5	113.1	15.9
S II	Unincorporated Business	22.0	130.0	41.9	24.3	122.4	66.0	46.0	119.0	18.8
S III	Non-Financial Corporations	69.1	252.7	69.8	4.0	224.1	206.5	92.7	345.4	37.9
S IV	Government Business Enterprises: Total	.8	.9	5.0	26.5	—17.5	15.9	—19.6	31.8	32.1
	(a) Federal	—1.8	— .5	— .7	19.3	—19.3	—	3.0	33.9	30.3
	(b) Provincial and Municipal Enterprises	2.6	1.4	5.7	7.2	1.8	15.9	—22.6	—2.1	1.8
S VI	Life Insurance									
	(a) Canadian Federal Companies	—12.0	—	—	— .1	—	.2	2.1	4.3	—1.2
S VII	Other Financial Institutions: Total	27.5	31.4	—1.0	14.8	43.1	—46.0	137.1	27.2	—52.3
	(a) Quebec Savings Banks	.1	— .7	1.4	—1.0	.9	—1.4	1.0	.6	.5
	(d) Trust Companies	—2.9	— .6	.8	— .5	.7	.4	— .7	2.2	—2.1
	(e) Mortgage Loan Companies	—	— .1	.1	—	—	—	—	.2	.1
	(h) Instalment Finance Companies	26.3	31.2	—3.0	15.6	40.9	47.5	121.8	25.2	—56.4
	(i) Small Loan Companies, etc.	4.0	2.2	1.0	.7	.6	.8	16.4	—1.1	5.6
	(k) Fire and Casualty Companies	—	—	—	—	—	.1	—	.1	—
	(l) Fraternal Benefit Societies	—	— .6	—1.3	—	—	1.6	—1.4	—	—
S VIII	Federal Government	—4.4	—	—	—	—	—	—	—	—
S IX	Provincial Governments	—11.0	24.0	26.1	—19.2	4.2	.6	11.7	—13.9	—3.5
S X	Municipal Governments	4.0	16.0	13.7	16.3	13.2	4.6	3.5	.4	10.5
S XI	Rest of the World	—	—	6.0	—	—	—	—	—	2.1
	Total Credits	103.0	476.0	193.0	94.8	500.0	229.0	349.0	627.3	60.3

CATEGORY C 3 (b): OTHER LOANS

Sector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S IV	Government Business Enterprises	—	—	—	—	—	2.5	3.2	— .4	.6
S VI	Life Insurance	—2.5	2.9	5.7	8.9	12.4	21.3	14.8	12.7	15.4
S VII	Other Financial Institutions	22.9	20.5	22.3	24.3	27.3	33.8	53.6	70.1	71.6
S VIII	Federal Government	649.8	563.5	64.0	113.3	—46.8	—56.5	—52.0	—83.9	—52.4
S IX	Provincial Governments	—1.1	—18.7	—13.7	2.1	6.0	6.5	12.7	40.4	38.5
S X	Municipal Governments	—5.4	—18.7	—8.3	—2.0	.2	—5.3	3.9	.1	—3.0
S XI	Rest of the World	—	—	—	—	—	25.0	22.2	20.0	—
	Total Debits	663.7	549.5	70.0	146.6	— .9	27.3	58.4	59.0	70.7
Credits (Liability Items)										
S I	Consumers	41.2	30.9	27.3	40.9	43.5	56.5	56.3	61.7	82.0
S II	Unincorporated Business	—5.7	—17.6	1.8	1.7	3.3	10.6	30.5	10.5	18.0
S III	Non-Financial Corporations	6.0	— .9	—2.9	—4.0	1.8	30.2	27.0	15.0	4.3
S IV	Government Enterprises	—	—	—	—	1.1	—1.1	—	—	—
S VII	Other Financial Institutions	—1.8	.2	2.0	.5	—2.5	.9	— .6	— .1	.6
S IX	Provincial Governments	—2.4	—2.0	—5.0	—3.8	—2.9	—2.8	—3.5	—3.5	—3.4
S X	Municipal Governments	.3	—20.1	—15.2	.1	4.8	—6.7	— .3	51.0	26.4
S XI	Rest of the World	626.1	559.0	62.0	111.2	—50.0	—60.3	—51.0	—75.6	—57.2
	Total Credits	663.7	549.5	70.0	146.6	— .9	27.3	58.4	59.0	70.7

CATEGORY C 3 (b): OTHER LOANS

To-Whom From-Whom Transactions

(millions of dollars)

Debits (Asset Items)	1946	1947	1948	1949	1950	1951	1952	1953	1954
S IV (b) Provincial and Municipal Enterprises									
To S III Non-Financial Corporations	—	—	—	—	—.1	2.5	3.2	—.4	.6
S VI Life Insurance: To S I Consumers: Total	—2.5	2.9	5.7	8.9	12.4	21.3	14.8	12.7	15.4
(a) Canadian Federal Companies	—1.4	2.2	4.7	6.7	9.6	16.1	11.2	9.4	11.2
(b) Provincial Companies	—	.2	.3	.4	.6	.9	.8	.8	.5
(c) British and Foreign Companies	—1.1	.5	.7	1.8	2.2	4.3	2.8	2.5	3.7
S VII Other Financial Institutions: Total	22.9	20.5	22.3	24.3	27.3	33.8	53.6	70.1	71.6
(a) Quebec Savings Banks:									
To S I Consumers	—.9	.3	—.3	.1	.2	.4	1.3	1.4	—.1
(b) Credit Unions:									
To S I Consumers	7.0	10.0	5.0	8.0	8.0	2.0	7.0	15.0	15.0
S II Unincorporated Business	1.0	—1.0	8.0	1.0	1.0	2.0	11.0	20.0	7.0
(c) Government Savings Institutions:									
To S I Consumers	1.4	.8	.8	.1	1.6	2.5	—.4	1.3	—.5
S III Non-Financial Corporations	1.3	.7	.8	.1	1.5	2.4	—.3	1.2	—.4
S V Municipal Governments	.2	.2	—	—	—	.3	.5	.4	.5
(d) Trust Companies:									
To S I Consumers	.5	—3.8	2.1	.5	.2	4.1	—.5	—1.9	13.8
(e) Mortgage Loan Companies:									
To S I Consumers	—.2	.2	.6	—.2	.2	.5	.2	.1	.3
(f) C.M.H.C. and V.L.A. Housing:									
To S X Municipal Governments	—	—	.8	.9	.8	.3	1.2	1.2	—1.6
(g) Other Government Lending Institutions:									
To S II Unincorporated Business	—	—	.1	—	.4	.3	1.3	—.3	.8
(i) Small Loan Companies and Licensed Money Lenders:									
To S I Consumers	13.9	14.3	7.6	14.7	14.1	18.8	32.0	31.4	36.1
(l) Fraternal Benefit Societies:									
To S I Consumers	—1.3	—1.2	—3.2	—.9	—.7	.2	.3	.3	.7
S VIII Federal Government: Total	649.8	563.5	64.0	113.3	—46.8	—56.5	—52.0	—83.9	—52.4
To S I Consumers	23.3	7.4	9.0	9.7	7.5	6.7	1.6	1.4	1.3
S III Non-Financial Corporations	2.9	—1.4	—1.7	—3.6	—1.1	.1	1.3	—5.9	4.7
S IX Provincial Governments	—2.4	—2.0	—5.0	—3.8	—2.9	—2.8	—3.5	—3.5	—3.4
S X Municipal Governments	—.1	.5	—.3	—.2	—.3	—.2	—.4	—.3	2.2
S XI Rest of the World	626.1	559.0	62.0	111.2	—50.0	—60.3	—51.0	—75.6	—57.2
S IX Provincial Governments: Total	—1.1	—18.7	—13.7	2.1	6.0	6.5	12.7	40.4	38.5
To S II Unincorporated Business	—1.3	2.1	2.0	2.7	1.7	13.6	14.3	—9.3	13.2
S X Municipal Governments	.2	—20.8	—15.7	—.6	4.3	—7.1	—1.6	49.7	25.3
S X Municipal Governments:									
To S II Unincorporated Business	—5.4	—18.7	—8.3	—2.0	.2	—5.3	3.9	.1	—3.0
S XI Rest of the World:									
To S III Non-Financial Corporations	—	—	—	—	—	25.0	22.2	20.0	—
Total Debits	663.7	549.5	70.0	146.6	—.9	27.3	58.4	59.0	70.7

CATEGORY C 3 (b): OTHER LOANS

To-Whom From-Whom Transactions

(millions of dollars)

Credits (Liability Items)	1946	1947	1948	1949	1950	1951	1952	1953	1954
S I Consumers: Total	41.2	30.9	27.3	40.9	43.5	56.5	56.3	61.7	82.0
From S VI Life Insurance Companies	—2.5	2.9	5.7	8.9	12.4	21.3	14.8	12.7	15.4
S VII (a) Quebec Savings Banks	— .9	.3	— .3	.1	.2	.4	1.3	1.4	— .1
(b) Credit Unions	7.0	10.0	5.0	8.0	8.0	2.0	7.0	15.0	15.0
(c) Government Savings Institutions	1.4	.8	.8	.1	1.6	2.5	— .4	1.3	— .5
(d) Trust Companies	.5	—3.8	2.1	.5	.2	4.1	— .5	—1.9	13.8
(e) Mortgage Loan Companies	— .2	.2	.6	— .2	.2	.5	.2	.1	.3
(i) Small Loan Companies, etc	13.9	14.3	7.6	14.7	14.1	18.8	32.0	31.4	36.1
(l) Fraternal Benefit Societies	—1.3	—1.2	—3.2	— .9	— .7	.2	.3	.3	.7
S VIII Federal Government	23.3	7.4	9.0	9.7	7.5	6.7	1.6	1.4	1.3
S II Unincorporated Business: Total	—5.7	—17.6	1.8	1.7	3.3	10.6	30.5	10.5	18.0
From S VII (b) Credit Unions	1.0	—1.0	8.0	1.0	1.0	2.0	11.0	20.0	7.0
(g) Government Lending Institutions	—	—	.1	—	.4	.3	1.3	— .3	.8
S IX Provincial Governments	—1.3	2.1	2.0	2.7	1.7	13.6	14.3	—9.3	13.2
S X Municipal Governments	—5.4	—18.7	—8.3	—2.0	.2	—5.3	3.9	.1	—3.0
S III Non-Financial Corporations: Total	6.0	— .9	—2.9	—4.0	1.8	30.2	27.0	15.0	4.3
From S IV Government Business Enterprises	—	—	—	—	—	2.5	3.2	— .4	.6
S VII (c) Government Savings Institutions	1.3	.7	.8	.1	1.5	2.4	— .3	1.2	— .4
S VIII Federal Government	2.9	—1.4	—1.7	—3.6	—1.1	.1	1.3	—5.9	4.7
S XI Rest of the World	—	—	—	—	—	25.0	22.2	20.0	—
Less S IV and S VII Credits:	1.8	— .2	—2.0	— .5	1.4	.2	.6	.1	— .6
S IV (b) Provincial and Municipal Enterprises	—	—	—	—	1.1	—1.1	—	—	—
S VII Other Financial Institutions: Total	—1.8	.2	2.0	.5	—2.5	.9	— .6	— .1	.6
(d) Trust Companies	—1.4	.2	.3	—	— .5	.2	— .1	— .1	.6
(j) Investment Companies	— .4	—	1.7	.5	—2.0	.7	— .5	—	—
S IX Provincial Governments:									
From S III Federal Government	—2.4	—2.0	—5.0	—3.8	—2.9	—2.8	—3.5	—3.5	—3.4
S X Municipal Governments: Total	.3	—20.1	—15.2	.1	4.8	—6.7	.3	51.0	26.4
From S VI (e) Government Savings Institutions	.2	.2	—	—	—	.3	.5	.4	.5
S VII (f) C.M.H.C. and V.L.A. Housing	—	—	.8	.9	.8	.3	1.2	1.2	—1.6
S VIII Federal Government	— .1	.5	— .3	— .2	— .3	— .2	— .4	— .3	2.2
S IX Provincial Governments	.2	—20.8	—15.7	— .6	4.3	—7.1	—1.6	49.7	25.3
S XI Rest of the World									
From S VIII Federal Government	626.1	559.0	62.0	111.2	—50.0	—60.3	—51.0	—75.6	—57.2
Total Credits	663.7	549.5	70.0	146.6	— .9	27.3	58.4	59.0	70.7

CATEGORY C 4 (a): CLAIMS ON ASSOCIATED ENTERPRISES, NON-CORPORATE

Sector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S I	Consumers	118.1	143.6	208.8	305.7	407.0	541.2	601.9	508.1	58.2
Credits (Liability Items)										
S II	Unincorporated Business	118.1	143.6	208.8	305.7	407.0	541.2	601.9	508.1	85.2

CATEGORY C 4 (b): CLAIMS ON ASSOCIATED ENTERPRISES, CORPORATE

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S III	Non-Financial Corporations	291.2	396.0	150.2	207.9	400.1	416.7	604.9	465.1	355.7
S V	Banking									
	(c) Chartered Banks	8.9	15.6	—3.7	—11.3	31.6	54.9	58.1	78.6	67.6
S VI	Life Insurance: Total	3.9	34.8	—20.5	—45.4	—12.4	—39.6	—47.0	—48.9	—31.2
	(a) Canadian Federal Companies	15.5	30.0	—4.4	—38.8	—7.5	—11.2	—22.8	—21.8	—24.7
	(c) British and Foreign Companies	—11.6	4.8	—16.1	—6.6	—4.9	—28.4	—24.2	—27.1	—6.5
S VII	Other Financial Institutions: Total	—3.4	2.4	—6.9	—13.0	—1.4	—2.7	3.4	—9.6	— .2
	(h) Instalment Finance Companies	— .9	2.7	1.1	— .1	1.0	.9	5.8	2.4	6.9
	(k) Fire and Casualty Companies	—1.7	— .8	—8.4	—11.2	—2.1	—4.2	—2.1	—11.8	—10.3
	(l) Fraternal Benefit Societies	— .8	.5	.4	—1.7	— .3	.6	— .3	— .2	3.2
S XI	Rest of the World	40.0	61.0	71.0	94.0	222.0	309.0	346.0	426.0	392.0
	Total Debits	340.6	509.8	190.1	232.2	639.9	738.3	965.4	911.2	783.9
Credits (Liability Items)										
S III	Non-Financial Corporations	298.3	450.3	222.3	293.5	630.4	679.3	849.6	800.0	655.8
S VII	Other Financial Institutions: Total	15.4	15.7	8.3	12.5	17.9	28.6	26.8	33.1	15.3
	(d) Trust Companies	—	—	.1	.1	—	— .1	— .1	—	—
	(h) Instalment Finance Companies	5.3	.3	—1.9	.8	1.5	8.7	6.9	7.1	—
	(i) Small Loan Companies, etc.	7.7	14.1	7.9	10.7	16.0	18.9	17.0	27.6	24.3
	(k) Fire and Casualty Companies	2.4	1.3	2.2	.9	.4	1.1	3.0	—1.6	—9.0
S XI	Rest of the World	26.9	43.8	—40.5	—73.8	—8.4	30.4	89.0	78.1	112.8
	Total Credits	340.6	509.8	190.1	232.2	639.9	738.3	965.4	911.2	783.9

CATEGORY C 4 (c): CLAIMS ON ASSOCIATED ENTERPRISES, GOVERNMENT

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S IV	Government Business Enterprises: ...... Total	22.7	58.6	1.5	49.3	—14.1	—3.8	30.0	—116.9	7.3
	(a) Federal Enterprises	3.1	17.3	2.6	— .7	— .8	11.3	4.1	—2.4	6.3
	(b) Provincial and Municipal Enterprises	19.6	41.3	—1.1	50.0	—13.3	—15.1	25.9	—114.5	1.0
S V	Banking									
	(a) Bank of Canada	5.0	10.0	—	—	—	2.8	3.0	5.5	— .7
S VIII	Federal Government	—115.2	—810.7	633.7	182.1	579.5	377.3	250.0	153.0	—67.1
S IX	Provincial Governments	42.6	64.0	69.9	71.6	89.6	229.4	165.3	213.8	136.3
S X	Municipal Governments	— .2	15.2	22.3	27.7	31.7	38.1	31.6	80.0	58.1
	Total Debits	—45.1	—662.9	727.4	330.7	686.7	643.8	479.9	335.4	133.9
Credits (Liability Items)										
S III	Non-Financial Corporations	—	—	1.4	.5	.4	.1	.7	1.0	.6
S IV	Government Business Enterprises: ...... Total	—63.7	58.9	156.7	106.8	45.6	374.5	302.6	263.8	—70.9
	(a) Federal Enterprises	—105.7	—33.4	97.5	—2.0	—16.6	165.8	137.1	147.9	—192.3
	(b) Provincial and Municipal Enterprises	67.0	119.3	95.2	147.8	105.2	256.7	218.5	172.9	182.4
	(c) Operation of Government Buildings	—25.0	—27.0	—36.0	—39.0	—43.0	—48.0	—53.0	—57.0	—61.0
S V	Banking: ...... Total	—26.5	—761.4	518.1	126.1	515.9	221.8	103.0	—39.4	119.4
	(a) Bank of Canada	—1.5	—2.2	.3	1.3	— .8	4.4	4.8	15.1	7.8
	(b) Exchange Fund	—25.0	—759.2	517.8	124.8	516.7	217.4	98.2	—54.5	111.6
S VII	Other Financial Institutions: ...... Total	45.1	33.7	52.9	96.2	125.9	51.1	71.7	107.5	82.6
	(c) Government Savings Institutions	— .1	— .1	— .2	—	— .1	— .1	— .1	— .1	.1
	(f) C.M.H.C. and V.L.A. Housing	40.1	22.2	53.8	92.9	118.6	46.2	64.1	93.9	64.9
	(g) Other Government Lending Institutions	— .1	6.2	— .9	3.3	6.7	4.3	8.5	14.3	13.7
	(m) Government Insurance Institutions	5.2	5.4	.2	—	.7	.7	— .8	— .6	3.9
S IX	Provincial Governments	—	.2	.1	— .1	.2	—	— .4	—	—
S X	Municipal Governments	—	5.7	—1.8	1.2	—1.3	—3.7	2.3	2.5	2.2
	Total Credits	—45.1	—662.9	727.4	330.7	686.7	643.8	479.9	335.4	133.9

CATEGORY C 5: MORTGAGES

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S I	Consumers	67.0	92.0	151.0	177.0	205.0	108.0	198.0	256.0	436.4
S III	Non-Financial Corporations	—4.0	—1.0	—1.0	—	2.0	3.0	4.0	2.0	8.2
S IV	Government Business Enterprises: Total	— .1	— .4	.2	— .1	.2	1.7	— .2	.2	— .1
	(a) Federal Enterprises	— .2	— .3	— .3	— .4	— .1	.9	— .7	— .9	— .2
	(b) Provincial and Municipal Enterprises	.1	— .1	.5	.3	.3	.8	.5	1.1	.1
S V	Banking:									
	(c) Chartered Banks	— .4	— .4	— .3	— .2	— .2	— .1	—	—	74.0
S VI	Life Insurance: Total	28.7	68.3	118.5	115.1	166.6	205.3	147.3	193.9	236.9
	(a) Canadian Federal Companies	28.1	67.4	112.3	107.3	130.7	137.1	105.8	150.5	209.7
	(b) Provincial Companies	.9	3.1	4.5	4.6	5.1	6.2	5.1	8.1	6.9
	(c) British and Foreign Companies	— .3	—2.2	1.7	3.2	30.8	62.0	36.4	35.3	20.3
S VII	Other Financial Institutions: Total	57.2	85.9	64.5	109.9	163.4	184.8	128.6	171.6	166.3
	(a) Quebec Savings Banks	—	—	—	.1	.3	1.2	2.7	2.3	6.0
	(b) Credit Unions	17.0	16.0	8.0	12.0	11.0	15.0	18.0	24.0	15.0
	(d) Trust Companies	7.4	5.8	10.4	10.3	14.6	14.9	7.7	12.4	25.7
	(e) Mortgage Loan Companies	14.1	20.7	28.2	30.2	30.3	26.1	25.2	34.0	42.1
	(f) C.M.H.C. and V.L.A. Housing	18.9	27.6	3.9	43.2	93.4	122.3	68.0	87.2	63.3
	(g) Other Government Lending Institutions	— .4	2.3	3.5	5.1	6.2	5.6	8.7	11.0	11.4
	(k) Fire and Casualty Companies	— .9	.8	—1.8	.6	.1	.9	.1	1.0	.9
	(l) Fraternal Benefit Societies	1.1	12.7	12.3	8.4	7.5	—1.3	—1.8	— .3	1.9
	(m) Government Insurance Institutions	—	—	—	—	—	.1	—	—	—
S VIII	Federal Government	18.1	30.1	16.5	14.6	7.9	4.6	2.4	2.7	4.5
S IX	Provincial Governments	1.0	.2	4.5	11.5	1.0	3.3	—1.8	— .1	6.2
S X	Municipal Governments	.6	—1.0	.3	—	—	—	.5	—	—
	Total Debits	168.1	273.7	354.2	427.8	545.9	510.6	478.8	626.3	932.4
Credits (Liability Items)										
S II	Unincorporated Business	150.1	203.7	315.2	369.8	480.9	409.6	396.2	544.3	747.0
S III	Non-Financial Corporations	18.0	70.0	39.0	58.0	65.0	101.0	82.0	82.0	186.0
S IV	Government Business Enterprises									
	(b) Provincial and Municipal Enterprises	—	—	—	—	—	—	.6	—	— .6
	Total Credits	168.1	273.7	354.2	427.8	545.9	510.6	478.8	626.3	932.4

CATEGORY C 6 (a): GOVERNMENT OF CANADA BONDS

Sector and Subsector Transactions

(millions of dollars)

Debits (Asset Items)		1946	1947	1948	1949	1950	1951	1952	1953	1954
S I	Consumers: ....Total	—255.3	—62.0	—528.8	—297.0	71.8	—220.3	122.9	296.7	—201.6
	Non-Marketable Bonds	475.0	175.0	55.0	105.0	46.0	65.0	81.0	382.0	458.0
	Refundable Tax	2.0	22.0	—61.0	—223.0	—	—	—	—	—
	Marketable Bonds	—732.3	—259.0	—522.8	—179.0	25.8	—285.3	41.9	—85.3	—659.6
S III	Non-Financial Corporations	—232.1	—148.3	—105.7	—4.7	136.7	—89.6	—187.0	—11.5	—33.0
S IV	Government Business Enterprises: ....Total	47.5	41.1	—63.8	—59.0	—4.0	—23.8	.1	7.0	29.3
	(a) Federal Enterprises	53.1	37.0	—71.4	—56.7	8.5	—17.7	—1.6	6.3	23.5
	(b) Provincial and Municipal Enterprises	—5.6	4.1	7.6	—2.3	—12.5	—6.1	1.7	.7	5.8
S V	Banking: ....Total	95.1	—669.2	445.0	140.7	—102.4	—68.2	67.7	4.3	456.2
	(a) Bank of Canada	61.5	—22.1	133.3	—3.6	60.9	256.3	43.7	46.3	—55.8
	(b) Exchange Fund	—5.4	1.9	— .3	—8.7	—9.5	— .5	—	—	—
	(c) Chartered Banks	39.0	—649.0	312.0	153.0	—32.0	—324.0	24.0	—42.0	512.0
S VI	Life Insurance: ....Total	142.3	—20.4	—172.1	—181.0	—226.3	—139.7	—83.3	—58.6	—194.1
	(a) Canadian Federal Companies	82.8	—19.1	—130.8	—120.8	—79.4	—95.9	—51.2	—45.8	—126.3
	(b) Provincial Companies	6.1	—1.5	—10.1	—4.6	—58.4	—7.1	—4.5	—4.9	—91.2
	(c) British and Foreign Companies	53.4	.2	—31.2	—55.6	—88.5	—36.7	—27.6	—7.9	23.4

CATEGORY C 6 (a): GOVERNMENT OF CANADA BONDS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (*Continued*)										
S VII	Other Financial Institutions: Total	52.3	32.7	3.8	—5.4	—12.4	—1.8	21.3	44.0	43.7
	(a) Quebec Savings Banks	9.6	8.4	10.1	1.1	—3.5	—3.4	5.9	—3.9	26.9
	(b) Credit Unions	3.5	1.2	3.2	3.0	— .1	3.3	7.8	5.5	4.4
	(c) Government Savings Institutions	—	—	1.2	1.4	—2.7	—1.9	.3	2.7	—4.2
	(d) Trust Companies	18.5	8.1	2.9	7.5	7.2	—12.6	—8.8	—2.9	39.5
	(e) Mortgage Loan Companies	9.3	—2.2	—18.7	—10.1	—6.8	2.2	— .6	1.9	17.3
	(f) C.M.H.C. and V.L.A. Housing	5.4	—5.6	—	—	—	—	—	—	3.1
	(g) Other Government Lending Institutions	.2	3.8	—5.2	—1.7	—3.6	—2.3	.1	—	— .2
	(i) Small Loan Companies, etc.	— .3	— .2	— .1	—	1.5	—1.4	—	—	—
	(j) Investment Companies	.1	7.2	1.5	2.0	.5	.5	—1.1	1.1	7.6
	(k) Fire and Casualty Companies	8.6	9.7	15.6	14.5	15.5	20.2	22.9	32.8	8.9
	(l) Fraternal Benefit Societies	—7.5	—3.1	—6.8	—22.8	—21.3	—7.1	—4.8	7.5	—7.2
	(m) Government Insurance Institutions	4.9	5.4	.1	— .3	.9	.7	— .4	— .7	1.4
S VIII	Federal Government	98.1	237.4	108.0	—368.2	54.6	180.2	79.0	209.7	—118.4
S IX	Provincial Governments	—24.8	28.0	.4	27.6	72.9	13.9	12.7	64.5	—59.1
S X	Municipal Governments	5.2	7.7	—12.6	—3.7	—2.7	—17.5	— .3	—2.3	1.7
S XI	Rest of the World	—16.7	—47.0	100.1	10.5	153.2	—166.0	—172.6	—127.8	—109.8
	Total Debits	—88.4	—600.0	—225.7	—740.2	141.4	—532.8	—139.5	426.0	—185.1
Credits (Liability Items)										
S IV	Government Business Enterprises									
	(a) Federal	—38.6	50.8	—46.4	28.3	28.7	—47.6	— .2	—	388.1
S VIII	Federal Government	—49.8	—650.8	—179.3	—768.5	112.7	—485.2	—139.3	426.0	—573.2
	Total Credits	—88.4	—600.0	—225.7	—740.2	141.4	—532.8	—139.5	426.0	—185.1

CATEGORY C 6 (b): PROVINCIAL BONDS

Sector and Subsector Transactions

(millions of dollars)

Debits (Asset Items)		1946	1947	1948	1949	1950	1951	1952	1953	1954
S I + S III		—25.0	—59.8	304.1	197.4	156.4	96.9	74.3	81.5	62.9
S IV	Government Business Enterprises: Total	6.7	31.3	—22.2	—16.9	—10.2	—4.1	22.1	—33.3	25.7
	(a) Federal Enterprises	—	— .4	—	—	6.0	— .3	1.3	.9	4.1
	(b) Provincial and Municipal Enterprises	6.7	31.7	—22.2	—16.9	—16.2	—3.8	20.8	—34.2	21.6
S V	Banking: Total	6.5	154.0	—40.0	—	—23.0	—65.0	—16.0	—22.0	—14.0
	(a) Bank of Canada	—1.5	—2.0	—	—	—	—	—	—	—
	(c) Chartered Banks	8.0	156.0	—40.0	—	—23.0	—65.0	—16.0	—22.0	—14.0
S VI	Life Insurance: Total	—18.8	39.4	22.6	80.0	14.3	—18.5	48.9	9.3	33.7
	(a) Canadian Federal Companies	—11.0	19.2	31.8	62.6	1.8	—24.9	27.3	2.0	19.9
	(b) Provincial Companies	— .8	1.5	2.4	2.4	1.3	—1.8	2.4	.2	14.4
	(c) British and Foreign Companies	—7.0	18.7	—11.6	15.0	11.2	8.2	19.2	7.1	— .6
S VII	Other Financial Institutions: Total	15.3	30.1	.6	—27.4	6.6	11.8	24.1	33.3	44.4
	(a) Quebec Savings Banks	5.5	5.4	.8	4.7	5.1	—2.9	— .5	.9	18.9
	(b) Credit Unions	2.6	.9	2.4	2.3	— .1	2.5	5.8	4.1	3.4
	(c) Government Savings Institutions	—	—	—	1.5	1.9	—	1.1	1.2	4.0
	(d) Trust Companies	2.6	3.0	6.6	9.8	5.3	— .3	2.7	2.8	23.5
	(e) Mortgage Loan Companies	.5	—2.0	1.6	1.1	—2.3	—1.9	.3	— .4	2.2
	(g) Other Government Lending Institutions	—	—	—	—	—	—	— .5	1.2	2.5
	(k) Fire and Casualty Companies	1.5	4.9	9.1	8.3	7.6	5.2	15.8	13.5	12.4
	(l) Fraternal Benefit Societies	2.6	17.9	—19.9	—55.1	—10.9	9.2	— .1	8.7	—24.9
	(m) Government Insurance Institutions	—	—	—	—	—	—	— .5	1.3	2.4
S IX	Provincial Governments	67.7	22.2	67.3	26.7	32.4	68.7	71.7	73.8	85.8
S X	Municipal Governments	—1.8	—1.5	—1.8	.3	—1.0	—6.1	—	— .8	5.6
S XI	Rest of the World	—26.0	—52.0	—25.4	—6.0	28.7	218.5	45.5	107.0	33.9
	Total Debits	24.6	163.7	305.2	254.1	204.2	302.2	270.6	248.8	278.0

CATEGORY C 6 (b): PROVINCIAL BONDS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)										
S IV	Government Business Enterprises: ...... Total	17.9	156.5	112.4	166.7	103.1	20.6	205.6	107.2	187.7
	(a) Federal Enterprises	— .6	—	—	— .1	—1.9	—	—	—	—
	(b) Provincial and Municipal Enterprises	18.5	156.5	112.4	166.8	105.0	20.6	205.6	107.2	187.7
S IX	Provincial Governments	6.4	7.6	121.4	102.9	107.2	278.1	57.0	119.5	75.9
S X	Municipal Governments	.3	— .4	71.4	—15.5	—6.1	3.5	8.0	22.1	14.4
	Total Credits	24.6	163.7	305.2	254.1	204.2	302.2	270.6	248.8	278.0

CATEGORY C 6 (c): MUNICIPAL BONDS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S I + S III		29.7	90.8	—71.2	—1.3	—14.3	48.4	81.7	83.8	88.6
S IV	Government Business Enterprises									
	(b) Provincial and Municipal Enterprises	2.3	—2.0	— .8	3.5	—1.4	—2.7	—9.4	10.7	9.1
S V	Banking									
	(c) Chartered Banks	24.0	18.0	7.0	21.0	33.0	—27.0	—8.0	—7.0	25.0
S VI	Life Insurance: Total	—25.6	—25.1	35.1	40.2	63.0	43.9	26.5	16.9	36.7
	(a) Canadian Federal Companies	—14.4	—3.6	32.5	32.6	35.6	39.7	27.7	14.2	19.6
	(b) Provincial Companies	—1.1	— .3	2.5	1.2	26.2	2.9	2.4	1.5	14.2
	(c) British and Foreign Companies	—10.1	—21.2	.1	6.4	1.2	1.3	—3.6	1.2	2.9
S VII	Other Financial Institutions: Total	14.4	—33.9	20.1	44.3	34.6	19.6	28.3	11.9	45.9
	(a) Quebec Savings Banks	1.9	—3.8	.5	3.1	2.7	2.7	5.2	4.3	9.6
	(b) Credit Unions	1.3	.4	1.2	1.1	—	1.2	3.0	2.0	1.7
	(c) Government Savings Institutions	—	—	—	.4	—	—	—	—	—
	(d) Trust Companies	3.1	2.9	3.8	4.2	1.9	2.6	2.5	.3	10.0
	(e) Mortgage Loan Companies	— .7	— .3	.5	1.3	.8	— .2	1.8	—1.2	3.1
	(k) Fire and Casualty Companies	— .8	— .8	3.7	2.6	2.2	9.0	9.8	12.3	11.8
	(l) Fraternal Benefit Societies	9.6	—32.3	10.4	31.6	27.0	4.3	6.0	—5.8	9.7
S IX	Provincial Governments	—7.7	—4.6	5.5	5.4	9.0	40.5	20.2	—10.4	15.6
S X	Municipal Governments	—16.5	—16.7	1.4	5.4	—3.1	—19.6	— .3	—2.6	7.0
S XI	Rest of the World	—41.9	—3.3	—19.7	—2.1	10.5	63.2	24.7	57.4	20.0
	Total Debits	—21.3	23.2	—22.6	116.4	131.3	166.3	163.7	160.7	247.9

CATEGORY C 6 (c): MUNICIPAL BONDS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)										
S IV	Government Business Enterprises									
	(b) Provincial and Municipal Enterprises...	— .1	—	— .6	—	—	— .2	—	—	—
S X	Municipal Governments....................	—21.2	23.2	—22.0	116.4	131.3	166.5	163.7	160.7	247.9
	Total Credits...........................	—21.3	23.2	—22.6	116.4	131.3	166.3	163.7	160.7	247.9

CATEGORY C 6 (d): OTHER BONDS

Sector and Subsector Transactions

(millions of dollars)

Debits (Asset Items)	1946	1947	1948	1949	1950	1951	1952	1953	1954
S I + S III	—119.3	—20.7	—122.6	11.0	104.6	137.8	109.4	173.0	22.4
S IV Government Business Enterprises: Total	— .5	— .7	— .1	—	— .8	—	—	1.0	—1.6
(a) Federal Enterprises	— .3	.6	.2	—	— .8	—	—	—	— 3.4
(b) Provincial and Municipal Enterprises	— .2	—1.3	— .3	—	—	—	—	1.0	1.8
S V Banking: Total	—100.1	—367.2	518.9	—28.5	552.3	—245.4	69.7	—171.9	41.0
(a) Bank of Canada	—	—	—	5.0	247.8	—157.4	—77.9	4.9	.3
(b) Exchange Fund	—203.1	—513.2	419.9	34.5	300.5	—66.0	154.6	—125.8	43.7
(c) Chartered Banks	103.0	146.0	99.0	—68.0	4.0	—22.0	—7.0	—51.0	—3.0
S VI Life Insurance: Total	35.2	115.7	213.4	189.8	182.0	171.8	124.8	155.6	190.0
(a) Canadian Federal Companies	20.3	58.1	101.4	102.5	45.4	112.1	59.9	90.7	88.6
(b) Provincial Companies	1.5	4.4	7.9	3.9	33.4	8.3	5.3	9.5	63.9
(c) British and Foreign Companies	13.4	53.2	104.1	83.4	103.2	51.4	59.6	55.4	37.5
S VII Other Financial Institutions: Total	9.8	33.3	32.9	54.8	23.4	18.8	26.0	19.7	67.3
(a) Quebec Savings Banks	—1.2	1.0	1.5	.6	.9	— .2	—1.2	2.4	5.1
(b) Credit Unions	1.3	.4	1.2	1.1	—	1.2	3.0	2.0	1.7
(c) Government Savings Institutions	—	—	—	— .4	—	—	—	— .1	— .2
(d) Trust Companies	3.3	5.1	2.8	.6	6.3	5.4	6.8	1.7	25.1
(e) Mortgage Loan Companies	1.2	1.3	— .1	— .5	—1.1	—1.8	2.9	1.0	5.2
(k) Fire and Casualty Companies	3.5	8.0	10.9	12.7	11.2	12.0	7.5	16.1	5.6
(l) Fraternal Benefit Societies	1.7	17.5	16.6	40.7	6.1	2.2	7.0	—3.4	24.8
S VIII Federal Government	—	—	—	6.9	3.1	—1.8	.7	—1.1	—1.5
S IX Provincial Governments	—2.6	—2.1	.7	1.6	— .1	— .5	20.1	—6.1	—11.0
S XI Rest of the World	—19.5	—144.9	23.5	—19.0	33.8	43.0	158.3	77.5	126.1
Total Debits	—197.0	—386.6	619.7	216.6	898.3	123.7	509.0	247.7	432.7

CATEGORY C 6 (d): OTHER BONDS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)										
S III	Non-Financial Corporations	15.9	197.8	134.2	167.2	292.4	261.0	390.8	268.4	400.3
S IV	Government Business Enterprises: Total	—22.3	—102.9	47.9	—25.8	7.5	—2.7	—11.4	—15.7	—10.3
	(a) Federal Enterprises	—3.3	2.5	47.7	—6.6	7.5	4.2	—9.7	—15.2	—9.5
	(b) Provincial and Municipal Enterprises	—19.0	—105.4	.2	—19.2	—	—6.9	—1.7	— .5	— .8
S VII	Other Financial Institutions: Total	8.6	37.1	18.1	33.4	81.2	110.1	38.8	125.0	—13.8
	(h) Instalment Finance Companies	5.5	37.5	18.7	34.2	79.9	110.4	39.2	124.4	—16.2
	(j) Investment Companies	3.1	— .4	— .6	— .8	1.3	— .3	— .4	.6	2.4
S XI	Rest of the World	—199.2	—518.6	419.5	41.8	517.2	—244.7	90.8	—130.0	56.5
	Total Credits	—197.0	—386.6	619.7	216.6	898.3	123.7	509.0	247.7	432.7

CATEGORY C 7: STOCKS

Sector and Subsector Transactions

(millions of dollars)

	1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)									
S I + S III	49.3	25.3	25.2	27.1	68.6	87.2	126.1	146.5	—22.4
S IV Government Business Enterprises									
(b) Provincial and Municipal Enterprises	—	3.1	— .2	—1.1	—1.2	— .3	.6	—	—
S VI Life Insurance: Total	.4	4.5	12.7	3.1	2.1	—6.7	10.6	10.3	12.5
(a) Canadian Federal Companies	—1.5	— .1	3.5	.7	2.4	—5.5	8.3	5.2	9.6
(b) Provincial Companies	—	.1	.4	.7	.7	—	—	.2	.7
(c) British and Foreign Companies	1.9	4.5	8.8	1.7	—1.0	—1.2	2.3	4.9	2.2
S VIII Other Financial Institutions: Total	24.9	—1.6	20.1	22.0	22.1	11.7	26.3	28.1	55.5
(d) Trust Companies	3.7	— .5	1.9	— .8	— .3	2.0	.1	1.2	1.2
(e) Mortgage Loan Companies	4.1	4.3	2.8	—1.0	—2.4	—8.7	1.0	— .6	4.3
(g) Other Government Lending Institutions	—	.2	1.0	—	2.9	—	—	.7	—1.2
(j) Investment Companies	4.2	—10.8	10.8	10.6	19.2	16.7	22.0	16.2	26.6
(k) Fire and Casualty Companies	2.4	3.9	— .5	2.4	1.6	.7	2.5	5.6	16.3
(l) Fraternal Benefit Societies	10.5	1.3	4.1	10.8	1.1	1.0	.7	5.0	8.3
S IX Provincial Governments	.1	—	—	—	—	—	—	—	—
S XI Rest of the World	—23.7	—34.1	7.1	—10.2	25.7	107.2	93.3	60.9	140.2
Total Debits	51.0	—2.8	64.9	40.9	117.3	199.1	256.9	245.8	185.8

CATEGORY C 7: STOCKS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits (Liability Items)										
S III	Non-Financial Corporations	69.2	—13.4	48.3	43.7	143.7	181.3	227.4	210.6	99.2
S V	Banking									
	(c) Chartered Banks	—	—	—	—	—	8.5	.9	10.9	42.5
S VI	Life Insurance									
	(a) Canadian Federal Companies	.1	.4	.1	.2	.5	.8	.1	.1	—
S VII	Other Financial Institutions: Total	4.2	11.1	7.8	17.8	29.6	19.2	34.5	38.0	47.5
	(d) Trust Companies	1.8	—1.2	1.6	.8	4.5	.5	— .1	1.0	.9
	(e) Mortgage Loan Companies	.1	.3	.2	—1.9	.6	—5.4	.5	1.4	.7
	(h) Instalment Finance Companies	1.7	6.4	.7	4.5	4.3	.6	14.5	11.5	8.1
	(j) Investment Companies	.6	4.8	4.5	13.9	19.7	21.7	16.9	16.6	35.0
	(k) Fire and Casualty Companies	—	.8	.8	.5	.5	1.8	2.7	7.5	2.8
S XI	Rest of the World	—22.5	— .9	8.7	—20.8	—56.5	—10.7	—6.0	—13.8	—3.4
	Total Credits	51.0	—2.8	64.9	40.9	117.3	199.1	256.9	245.8	185.8

CATEGORY C 6 (b), (c) AND (d) AND C 7: OTHER BONDS AND STOCKS

Transactions of Sector I and III

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S I	Consumers	52.8	116.9	135.6	232.9	352.1	301.5	211.0	263.0	—12.5
S III	Non-Financial Corporations	—118.1	—81.3	— .1	1.3	—36.8	68.8	180.5	221.8	164.0
	Total Debits	—65.3	35.6	135.5	234.2	315.3	370.3	391.5	484.8	151.5
Credits (Liability Items)										
C 6	(b) Provincial Bonds	—25.0	—59.8	304.1	197.4	156.4	96.9	74.3	81.5	62.9
	(c) Municipal Bonds	29.7	90.8	—71.2	—1.3	—14.3	48.4	81.7	83.8	88.6
	(d) Other Bonds	—119.3	—20.7	—122.6	11.0	104.6	137.8	109.4	173.0	22.4
C 7	Stocks	49.3	25.3	25.2	27.1	68.6	87.2	126.1	146.5	—22.4
	Total Credits	—65.3	35.6	135.5	234.2	315.3	370.3	391.5	484.8	151.5

CATEGORY C 8: INSURANCE AND PENSIONS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S I	Consumers	254.7	314.3	305.9	307.6	322.1	308.9	350.8	378.3	416.2
Credits (Liability Items)										
S IV	Government Business Enterprises: Total	.5	— .3	.8	—1.8	— .2	.3	1.7	—1.7	.2
	(a) Federal Enterprises	—	—	—	—	—	—	.2	.1	.1
	(b) Provincial and Municipal Enterprises	.5	— .3	.8	—1.8	— .2	.3	1.5	—1.8	.1
S VI	Life Insurance: Total	189.7	227.8	211.6	230.8	251.6	234.8	271.1	301.6	326.8
	(a) Canadian Federal Companies	134.9	163.7	149.3	162.1	185.3	165.2	190.2	212.4	233.0
	(b) Provincial Companies	8.0	7.8	8.1	8.9	9.6	11.6	12.3	16.0	9.8
	(c) British and Foreign Companies	46.8	56.3	54.2	59.8	56.7	58.0	68.6	73.2	84.0
S VII	Other Financial Institutions: Total	10.9	11.6	8.6	11.1	8.8	15.5	17.1	15.2	27.1
	(d) Trust Companies	—	.1	.1	— .1	—	—	.2	.1	— .1
	(e) Mortgage Loan Companies	—	—	—	.5	— .5	—	—	—	.1
	(f) C.M.H.C. and V.L.A. Housing	—	.1	—	—	—	.1	.1	—	— .2
	(g) Other Government Lending Institutions	—	—	—	—	—	—	—	—	.1
	(k) Fire and Casualty Companies	.1	—	—	.1	— .1	.5	.5	.2	.5
	(l) Fraternal Benefit Societies	10.8	11.4	8.5	10.6	9.4	14.9	16.3	14.9	26.7
S VIII	Federal Government	53.6	75.2	84.9	67.5	61.9	58.3	60.9	63.2	62.1
	Total Credits	254.7	314.3	305.9	307.6	322.1	308.9	350.8	378.3	416.2

CATEGORY C 9: FOREIGN INHERITANCES AND MIGRANTS' FUNDS

Sector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S I	Consumers	35.0	49.0	50.0	59.0	61.0	70.0	144.0	116.0	94.0
S XI	Rest of the World	65.0	69.0	84.0	68.0	57.0	77.0	85.0	91.0	89.0
	Total Debits	100.0	118.0	134.0	127.0	118.0	147.0	229.0	207.0	183.0
Credits (Liability Items)										
S I	Consumers	65.0	69.0	84.0	68.0	57.0	77.0	85.0	91.0	89.0
S XI	Rest of the World	35.0	49.0	50.0	59.0	61.0	70.0	144.0	116.0	94.0
	Total Credits	100.0	118.0	134.0	127.0	118.0	147.0	229.0	207.0	183.0

CATEGORY D: OTHER TRANSACTIONS AND ERRORS

Sector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S I	Consumers	5.5	12.6	4.8	6.0	18.6	5.5	39.8	31.4	9.3
S III	Non-Financial Corporations	181.5	264.7	293.8	201.8	693.4	733.9	468.8	555.7	659.3
S IV	Government Business Enterprises	—179.8	3.6	10.5	18.2	—12.1	59.7	90.2	107.7	40.8
S V	Banking	4.9	—6.4	3.7	—7.5	17.6	—7.8	17.0	1.1	5.4
S VI	Life Insurance	1.2	7.0	8.5	15.9	44.6	2.0	25.8	23.4	27.4
S VII	Other Financial Institutions	32.4	16.6	14.8	27.2	73.5	—29.3	—4.1	15.7	—10.5
S VIII	Federal Government	40.2	—9.1	29.5	28.2	145.9	154.4	31.2	—139.7	—49.3
S IX	Provincial Governments	1.1	8.9	2.1	7.0	4.6	6.3	16.5	15.3	15.8
S X	Municipal Governments	16.6	51.3	10.6	26.9	36.2	49.0	21.1	63.7	39.0
	Total Debits	103.6	349.2	378.3	323.7	1,022.3	973.7	706.3	674.3	737.2

CATEGORY D: OTHER TRANSACTIONS AND ERRORS

Sector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits	**(Liability Items)**									
S I	Consumers	42.4	187.2	—278.7	—58.5	644.1	63.1	485.9	302.6	715.1
S III	Non-Financial Corporations	—71.3	299.7	336.4	35.2	390.7	958.0	—488.8	—192.0	—75.5
S IV	Government Business Enterprises	25.2	40.4	22.6	16.4	19.1	44.3	124.1	161.8	—34.5
S V	Banking	11.1	—18.3	—12.9	—28.7	—19.3	—22.1	—9.6	13.0	30.5
S VI	Life Insurance	—3.6	2.0	3.0	2.0	1.6	— .1	2.8	.8	2.5
S VII	Other Financial Institutions	28.0	39.9	47.0	29.6	62.3	40.7	95.3	97.3	34.1
S VIII	Federal Government	40.4	—178.8	199.1	68.8	1.0	—46.6	—27.5	24.5	59.1
S IX	Provincial Governments	19.0	—42.3	—3.3	93.1	34.6	41.2	140.5	39.1	28.3
S X	Municipal Governments	24.6	58.1	59.9	50.8	44.4	10.1	23.9	84.5	7.7
S XI	Rest of the World	—12.2	—38.7	5.2	115.0	—156.2	—115.9	359.7	142.7	—30.1
	Total Credits	103.6	349.2	378.3	323.7	1,022.3	973.7	706.3	674.3	737.2

CATEGORY D (a): TRANSFERS OF EXISTING REAL ASSETS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S III	Non-Financial Corporations	—	—	62.5	95.1	72.3	84.9	87.3	167.6	183.6
S IV	Government Business Enterprises: .... Total	—174.5	3.4	11.0	—20.1	—1.6	12.0	24.9	20.6	18.9
	(a) Federal Enterprises	—174.5	—36.4	—15.8	—20.1	—33.5	12.0	24.9	20.6	18.9
	(b) Provincial and Municipal Enterprises	—	39.8	26.8	—	31.9	—	—	—	—
S V	Banking:	—1.9	1.2	— .2	2.9	9.3	—4.4	—1.7	—22.8	—6.6
S VI	Life Insurance: .... Total	—3.1	.6	1.5	8.3	10.3	18.2	17.3	9.0	20.6
	(a) Canadian Federal Companies	—3.3	— .3	.7	7.9	10.0	17.4	16.4	8.2	19.1
	(b) Provincial Companies	—	—	—	.3	.3	.7	.6	.4	.5
	(c) British and Foreign Companies	.2	.9	.8	.1	—	.1	.3	.4	1.0
S VII	Other Financial Institutions: .... Total	—6.0	—5.3	4.2	—6.9	—16.2	—48.9	—19.9	—17.3	1.6
	(f) C.M.H.C. and V.L.A. Housing	—	—	9.9	—5.8	—17.6	—56.4	—21.2	—15.3	—4.3
	(g) Other Government Lending Institutions	— .3	— .2	— .1	— .1	— .1	— .1	— .2	— .3	— .1
	(j) Investment Companies	—	.3	—	—	—	.1	—	—	.1
	(l) Fraternal Benefit Societies	—3.6	—5.0	—5.9	—1.0	— .1	8.3	4.9	3.6	9.5
	Adjustment	—2.1	— .4	.3	—	1.6	— .8	—3.4	—5.9	—3.6
S VIII	Federal Government	5.9	3.2	1.6	7.8	4.3	5.0	6.3	6.9	4.8
S IX	Provincial Governments	3.5	5.6	7.6	6.2	6.9	6.9	9.7	10.6	13.6
	Total Debits	—176.1	8.7	88.2	93.3	85.3	73.7	123.9	174.6	236.5
Credits (Liability Items)										
S VIII	Federal Government	15.9	32.6	26.9	21.8	18.4	25.6	19.4	24.3	34.6
S IX	Provincial Governments	2.1	2.0	11.0	22.0	3.1	14.7	22.0	45.8	43.1
	Total Credits	18.0	34.6	37.9	43.8	21.5	40.3	41.4	70.1	77.7

CATEGORY D (b): SPECIAL DEPOSIT AND TRUST ACCOUNTS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Debits (Asset Items)										
S I	Consumers	5.5	12.6	4.8	6.0	18.6	5.5	39.8	31.4	9.3
S III	Non-Financial Corporations	1.0	1.3	5.5	2.1	4.1	5.8	5.3	—4.4	— .1
S IV	Government Business Enterprises: Total	2.2	—2.1	—	2.2	—1.3	— .9	.8	3.7	3.4
	(a) Federal Enterprises	— .2	.5	—	1.1	.3	1.0	—1.1	1.1	—
	(b) Provincial and Municipal Enterprises	2.4	—2.6	—	1.1	—1.6	—1.9	1.9	2.6	3.4
S V	Banking:									
	(c) Chartered Banks	— .4	— .2	— .2	— .1	— .8	—	—	—	—
S VII	Other Financial Institutions: Total	17.7	1.8	1.3	3.9	—1.2	1.3	5.6	3.7	10.1
	(c) Government Savings Institutions	17.7	1.8	1.3	3.9	—1.2	— .3	5.9	3.8	10.1
	(g) Other Government Lending Institutions	—	—	—	—	—	1.6	— .3	— .1	—
S IX	Provincial Governments	—	—	—	—	—	—8.2	— .9	—	—
	Total Debits	26.0	13.4	11.4	14.1	19.4	3.5	50.6	34.4	22.7
Credits (Liability Items)										
S IV	Government Business Enterprises: Total	1.1	—1.4	.5	.9	— .2	— .1	—3.9	2.1	2.8
	(a) Federal Enterprises	.2	— .1	.1	.4	— .5	.1	—	.5	— .3
	(b) Provincial and Municipal Enterprises	.9	—1.3	.4	.5	.3	— .2	—3.9	1.6	3.1
S VII	Other Financial Institutions: Total	2.0	4.9	7.3	7.2	13.0	—1.9	28.0	19.8	— .9
	(e) Mortgage Loan Companies	—	—	—	—	.1	.1	.1	.1	.1
	(f) C.M.H.C. and V.L.A. Housing	—	—	3.3	.9	1.6	—2.3	.7	— .8	— .5
	(h) Instalment Finance Companies	2.0	4.9	4.0	6.3	11.3	.3	27.2	20.5	— .5
S VIII	Federal Government	—1.8	7.6	3.1	4.5	6.8	7.1	17.5	8.1	—
S IX	Provincial Governments	24.7	2.3	.5	1.5	— .2	—1.6	5.9	4.0	23.7
S X	Municipal Governments	—	—	—	—	—	—	3.1	.4	—2.9
	Total Credits	26.0	13.4	11.4	14.1	19.4	3.5	50.6	34.4	22.7

CATEGORY D (c): RECORDED RECEIVABLES

Sector and Subsector Transactions

(millions of dollars)

Debits (Asset Items)		1946	1947	1948	1949	1950	1951	1952	1953	1954
S III	Non-Financial Corporations	182.5	258.4	219.2	134.0	529.7	490.7	138.6	256.3	359.4
S IV	Government Business Enterprises: Total	—7.3	.8	—1.9	36.1	—8.2	47.1	63.2	83.2	8.6
	(a) Federal Enterprises	—9.5	—6.3	— .7	11.4	3.3	35.3	60.2	71.6	3.7
	(b) Provincial and Municipal Enterprises	2.2	7.1	—1.2	24.7	—11.5	11.8	3.0	11.6	4.9
S V	Banking: Total	6.3	—9.6	2.3	—7.3	1.8	5.0	19.4	25.0	11.2
	(a) Bank of Canada	7.3	—9.3	.6	—7.8	1.1	4.7	19.6	24.6	12.7
	(b) Exchange Fund	—1.0	— .3	1.7	.5	.7	.3	— .2	.4	—1.5
S VI	Life Insurance: Total	4.3	6.4	7.0	7.6	34.3	—16.2	8.5	14.4	6.8
	(a) Canadian Federal Companies	3.1	4.6	5.7	5.8	31.7	—19.6	6.4	10.0	4.6
	(b) Provincial Companies	.1	.3	.3	.1	.3	.3	.4	.7	.1
	(c) British and Foreign Companies	1.1	1.5	1.0	1.7	2.3	3.1	1.7	3.7	2.1
S VII	Other Financial Institutions: Total	19.8	20.8	6.8	26.0	76.1	10.3	3.4	29.6	—16.6
	(c) Government Savings Institutions	— .8	.3	1.2	—2.6	— .4	.3	— .1	.1	—
	(d) Trust Companies	.5	.2	.1	.3	.4	.1	.2	.1	1.4
	(e) Mortgage Loan Companies	— .1	— .3	— .1	.5	—	.5	—	—1.3	—
	(f) C.M.H.C. and V.L.A. Housing	.4	—1.7	1.8	14.1	28.3	—38.3	—	— .7	— .5
	(g) Other Government Lending Institutions	—	—	—	—	.1	— .7	— .3	1.1	.9
	(h) Instalment Finance Companies	14.4	14.8	— .5	8.9	35.8	39.6	—5.7	20.0	—23.3
	(j) Investment Companies	—	.9	— .5	.2	.4	— .1	—	.1	.6
	(k) Fire and Casualty Companies	5.4	6.8	4.8	3.7	10.5	8.0	8.2	10.0	1.4
	(l) Fraternal Benefit Societies	—	— .2	—	.9	1.0	.8	.5	— .4	2.3
	(m) Government Insurance Institutions	—	—	—	—	—	.1	.6	.6	.6
S VIII	Federal Government	34.3	—12.3	27.9	20.4	141.6	149.4	24.9	—146.6	—54.1
S IX	Provincial Governments	—2.4	3.3	—5.5	.8	—2.3	7.6	7.7	4.7	2.2
S X	Municipal Governments	—2.7	1.3	13.1	15.2	12.2	19.0	6.0	20.4	32.2
	Total Debits	234.8	269.1	268.9	232.8	785.2	712.9	271.7	287.0	349.7

CATEGORY D (c): RECORDED PAYABLES

Sector and Subsector Transactions

(millions of dollars)

Credits (Liability Items)		1946	1947	1948	1949	1950	1951	1952	1953	1954
S III	Non-Financial Corporations	136.3	381.7	106.8	—2.1	559.8	620.7	119.0	131.8	52.7
S IV	Government Business Enterprises: Total	64.4	26.8	80.6	.1	—28.3	40.6	162.0	154.7	—60.5
	(a) Federal Enterprises	61.0	19.0	74.0	—12.0	—28.2	31.9	150.8	143.4	—56.9
	(b) Provincial and Municipal Enterprises	3.4	7.8	6.6	12.1	— .1	8.7	11.2	11.3	—3.6
S V	Banking: Total	4.7	.9	2.6	—3.7	— .1	4.0	.4	9.8	32.3
	(a) Bank of Canada	3.9	— .2	2.4	—3.8	.5	1.1	—2.3	7.4	18.1
	(c) Chartered Banks	.8	1.1	.2	.1	— .6	2.9	2.7	2.4	14.2
S VI	Life Insurance: Total	— 4.3	2.2	2.4	.6	2.6	.6	3.8	2.8	.1
	(a) Canadian Federal Companies	—3.2	1.6	2.2	.9	2.1	.5	2.7	2.1	5.5
	(b) Provincial Companies	—1.4	.7	— .1	—	—	— .3	.1	.5	.2
	(c) British and Foreign Companies	.3	— .1	.3	— .3	.5	.4	1.0	.2	—5.6
S VII	Other Financial Institutions: Total	25.6	34.8	35.4	33.3	49.7	54.8	69.9	68.8	51.4
	(b) Credit Unions	—	.5	1.1	.4	—1.1	1.1	.2	4.6	4.2
	(c) Government Savings Institutions	—	—	—	—	—	.4	— .1	.5	.1
	(d) Trust Companies	.4	— .7	—	.4	.3	.2	.4	— .1	1.3
	(e) Mortgage Loan Companies	.8	—1.9	—2.3	.2	.4	.4	.3	.1	.9
	(f) C.M.H.C. and V.L.A. Housing	.2	.8	4.4	2.4	2.0	—2.8	2.7	— .3	.8
	(g) Other Government Lending Institutions	—	—	—	—	—	.1	.2	.5	—
	(h) Instalment Finance Companies	.1	.9	.9	1.2	2.1	3.0	4.5	1.2	1.2
	(i) Small Loan Companies and Licensed Money Lenders	.9	—	.5	.9	.8	.5	2.7	1.3	.2
	(j) Investment Companies	.2	—	— .1	.4	—	1.8	— .7	—	.6
	(k) Fire and Casualty Companies	22.7	35.9	30.6	27.5	45.1	49.4	58.7	59.2	41.0
	(l) Fraternal Benefit Societies	.3	— .7	.3	— .1	.1	.5	.2	— .5	.3
	(m) Government Insurance Institutions	—	—	—	—	—	.2	.8	2.3	.8
S VIII	Federal Government	11.2	—32.1	—12.4	3.2	30.0	—52.2	27.7	70.4	—27.5
S IX	Provincial Governments	12.9	8.7	—5.7	9.4	11.8	— 2.2	—1.6	2.0	—4.6
S X	Municipal Governments	—3.6	2.1	15.2	2.8	4.1	19.2	9.4	17.8	—1.5
S XI	Rest of the World	3.9	—5.3	—20.0	59.0	—208.2	—118.1	367.2	125.1	—23.2
	Total Credits	213.3	419.8	201.9	102.6	421.4	567.4	757.8	583.2	19.2

CATEGORY D (d): UNCLASSIFIED TRANSACTIONS

Sector and Subsector Transactions

(millions of dollars)

Debits (Asset Items)		1946	1947	1948	1949	1950	1951	1952	1953	1954
S III	Non-Financial Corporations	—2.0	5.0	6.6	—29.4	87.3	152.5	237.6	136.2	116.4
S IV	Government Business Enterprises: Total	— .2	1.5	1.4	—	—1.0	1.5	1.3	.2	9.9
	(a) Federal Enterprises	— .2	1.3	1.4	— .5	—1.4	1.5	1.3	.2	9.6
	(b) Provincial and Municipal Enterprises	—	.2	—	.5	.4	—	—	—	.3
S V	Banking: Total	.9	2.2	1.8	—3.0	7.3	—8.4	— .7	—1.1	.8
	(a) Bank of Canada	— .3	1.0	1.1	—1.7	9.1	—7.7	—1.4	—	.7
	(c) Chartered Banks	1.2	1.2	.7	—1.3	—1.8	— .7	.7	—1.1	.1
S VII	Other Financial Institutions: Total	.9	— .7	2.5	4.2	14.8	8.0	6.8	— .3	—5.6
	(a) Quebec Savings Banks	—	—	— .3	—	—	—	—	— .1	—
	(b) Credit Unions	—	— .3	1.5	.6	5.5	5.6	3.5	—4.3	—6.9
	(c) Government Savings Institutions	—	—	— .1	.1	.1	—	— .1	.1	—
	(d) Trust Companies	.1	.4	— .3	.7	2.1	.4	.5	.1	.8
	(e) Mortgage Loan Companies	.1	—2.1	1.7	2.6	6.4	— .2	1.1	1.0	4.2
	(f) C.M.H.C. and V.L.A. Housing	—	—	—	.1	.1	—	—	—	—
	(g) Other Government Lending Institutions	.1	.1	—	—	—	—	.1	.1	— .2
	(h) Instalment Finance Companies	.3	.2	.1	.4	.2	1.1	— .3	1.3	.5
	(i) Small Loan Companies and Licensed Money Lenders	.3	1.0	— .1	— .3	.4	1.1	2.0	1.5	—4.0
S X	Municipal Governments	19.3	50.0	—2.5	11.7	24.0	30.0	15.1	43.3	6.8
	Total Debits	18.9	58.0	9.8	—16.5	132.4	183.6	260.1	178.3	128.3

CATEGORY D (d): UNCLASSIFIED TRANSACTIONS

Sector and Subsector Transactions

(millions of dollars)

		1946	1947	1948	1949	1950	1951	1952	1953	1954
Credits	**(Liability Items)**									
S III	Non-Financial Corporations	130.0	—260.7	133.6	—266.3	—20.8	224.5	188.2	176.0	247.8
S IV	Government Business Enterprises: Total	—4.7	— .7	— .8	5.5	—5.8	3.7	— .8	—2.0	9.5
	(a) Federal Enterprises	—5.1	— .7	—1.0	5.4	—4.3	3.6	—1.0	—2.5	8.9
	(b) Provincial and Municipal Enterprises	.4	—	.2	.1	—1.5	.1	.2	.5	.6
S V	Banking: Total	—1.7	1.6	.7	— .7	— .7	3.3	10.5	.5	—4.5
	(a) Bank of Canada	—2.4	2.0	.7	— .7	— .2	3.3	10.6	.5	—4.5
	(b) Exchange Fund	.7	— .4	—	—	— .5	—	— .1	—	—
S VII	Other Financial Institutions: Total	— .4	— .3	9.1	—9.2	4.7	—2.8	2.5	14.1	—14.7
	(a) Quebec Savings Banks	— .7	— .2	— .2	—	.1	—	—	.1	—
	(b) Credit Unions	—	.3	9.3	—9.3	4.3	—1.8	1.9	13.2	—15.6
	(c) Government Savings Institutions	—	—	—	—	—	—	.1	—	—
	(d) Trust Companies	— .3	— .2	— .3	.2	— .2	— .2	—	.4	.2
	(e) Mortgage Loan Companies	.6	— .2	.3	— .1	.5	— .8	.5	.4	.7
S X	Municipal Governments	12.9	28.4	—1.0	5.1	15.5	10.6	—10.1	18.1	5.9
S XI	Rest of the World	4.2	24.0	.5	13.3	8.7	—9.0	—18.2	—17.2	—13.4
	Total Credits	140.3	—207.7	142.1	—252.3	1.6	230.3	172.1	189.5	230.6

CATEGORY D (e): RESIDUAL

Sector and Subsector Transactions

(millions of dollars)

Credits (Liability Items)		1946	1947	1948	1949	1950	1951	1952	1953	1954
S I	Consumers	42.4	187.2	—278.7	—58.5	644.1	63.1	485.9	302.6	715.1
S III	Non-Financial Corporations	—337.6	178.7	96.0	303.6	—148.3	113.8	—796.0	—499.8	—376.0
S IV	Government Business Enterprises: Total	—35.6	15.7	—57.7	9.9	53.4	.1	—33.2	7.0	13.7
	(a) Federal Enterprises	—21.4	—7.4	— 4.9	—8.7	—10.7	— .3	— .1	9.9	3.1
	(b) Provincial and Municipal Enterprises	—14.2	23.1	—52.8	18.6	64.1	.4	—33.1	—2.9	10.6
S V	Banking									
	(c) Chartered Banks	8.1	—20.8	—16.2	—24.3	—18.5	—29.4	—20.5	2.7	2.7
S VI	Life Insurance									
	(a) Canadian Federal Companies	.7	— .2	.6	1.4	—1.0	— .7	—1.0	—2.0	2.4
S VII	Other Financial Institutions: Total	.8	.5	—4.8	—1.7	—5.1	—9.4	—5.1	—5.4	—1.7
	(a) Quebec Savings Banks	— .1	— .1	— .3	— .1	—	—	— .2	—	— .1
	(b) Credit Unions	.2	.4	— .5	.8	— .8	.1	— .1	— .4	—
	(c) Government Savings Institutions	.3	.1	.1	.1	.2	—	.1	.4	.2
	(d) Trust Companies	—	—	.1	— .2	.2	.3	.1	.1	—
	(e) Mortgage Loan Companies	— .2	.4	.1	— .1	— .1	—	— .1	— .3	—
	(f) C.M.H.C. and V.L.A. Housing	— .2	— .1	—4.3	—2.2	—3.9	—9.2	—6.4	—5.0	—1.6
	(g) Other Government Lending Institutions	— .1	—	—	.2	— .1	— .3	.8	— .6	— .1
	(h) Instalment Finance Companies	—	.2	.1	— .2	—	— .2	.2	.1	—
	(i) Small Loan Companies and Licensed Money Lenders	—	— .1	— .1	—	—	—	—	—	— .2
	(k) Fire and Casualty Companies	.7	— .4	.3	—	— .4	— .2	.1	— .4	—1.0
	(l) Fraternal Benefit Societies	.3	.2	— .3	.1	— .1	.2	.3	.6	.8
	(m) Government Insurance Institutions	— .1	— .1	—	— .1	— .1	— .1	.1	.1	.1
S VIII	Federal Government	15.1	—186.9	181.5	39.3	—54.2	—27.1	—92.1	—78.3	52.0
S IX	Provincial Governments	—20.7	—55.3	—9.1	60.2	19.9	30.3	114.2	—12.7	—33.9
S X	Municipal Governments	15.3	27.6	45.7	42.9	24.8	—19.7	21.5	48.2	6.2
S XI	Rest of the World	—12.5	—57.4	24.7	42.7	43.3	11.2	10.7	34.8	6.5
	Total Credits	—324.0	89.1	—18.0	415.5	558.4	132.2	—315.6	—202.9	387.0

Appendix A

STUDIES FOR THE COMMISSION ALREADY PUBLISHED

Output, Labour and Capital in the Canadian Economy —
by Wm. C. Hood and Anthony Scott

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The Nova Scotia Coal Industry —
by Urwick, Currie Limited

Canadian Economic Growth and Development from
1939 to 1955 —
by J. M. Smith

Final Report

* Prepared under the direction of S. S. Reisman.

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